



**EDCI 695: Doctoral Research Methodology
COURSE SYLLABUS: FALL 2012**

Instructor: David L. Brown, Ph.D.
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COURSE INFORMATION

Class Meetings:

Aug 29	Wednesday	4:30 PM – 10:00 PM
Sep 12	Wednesday	4:30 PM – 10:00 PM
Sep 26	Wednesday	4:30 PM – 10:00 PM
Oct 10	Wednesday	4:30 PM – 10:00 PM
Oct 17	Wednesday	4:30 PM – 10:00 PM
Oct 31	Wednesday	4:30 PM – 10:00 PM
Nov 14	Wednesday	4:30 PM – 10:00 PM
Dec 05	Wednesday	4:30 PM – 10:00 PM

* Denotes Instructor Attending Conference (if indicated above)

Materials – Textbooks, Readings, Supplementary Readings:

Textbook(s) Required:

1. Best, John W.T Kohn, James (2006) Research in Education (10th Edition) Allyn & Bacon Boston, MA. (ISBN – 0-205-458408)
2. Pyrezak, Fred (2008) Evaluating Research in Academic Journals. A Practical Guide to Realistic Evaluation, PYREZAK Publishing, Glendale, California (ISBN – 1 – 884585 – 78 –7)
3. American Psychological Association (2010) Publications Manual of the American Psychological Association (6th Edition), Washington. D. C.
4. Patten, Mildred L., (2010) Proposing Empirical Research: A Guide to the Fundamentals (4th Edition) PYREZAK Publishing, Glendale, California (ISBN 1-884585-89-2)

Prerequisite:

Doctoral level standing or consent of instructor

Multiple individualized reading and writing assignments will be required of all class participants.

Course Description:

This course is intended to familiarize doctoral students with basic research concepts and their application in conducting educational research. Further, this course is designed to help doctoral students make some of the decisions for their own research proposals. Because no one research design or methodology is considered best practice, this course places a balanced emphasis on various data collection and analysis techniques. Consequently, students will become familiar with tools with which to determine the best approach for a problem they wish to investigate, the nature of their research objectives, and the constraints of the research problem. Students will broaden their knowledge of how to access, understand, and evaluate research reports. Finally students will learn the initial steps of drafting a research proposal.

Student Learning Outcomes:

1. Distinguish between opinion articles and reports of systematic research.
2. To explore the trends and issues related to the development of a research proposal.
3. To develop an understanding of the various components of an effective research proposal.
4. To gain familiarity with a variety of qualitative and quantitative data collection and analysis techniques.
5. To identify a research problem within your field of concentration, to generate appropriate research questions, and to explore the choice of an appropriate methodology and design
6. To explore issues in designing a clearly focused, defensible research project
7. Describe the Principles underlying randomized experiments and their advantages for making casual inferences.
8. Select appropriate measures for assessing outcomes, describing implementation fidelity, and capturing process variables.
9. Acquire knowledge and strategies for designing and conducting a randomized trial.

COURSE REQUIREMENTS

Protection Human Subjects Training**Collaborative Institutional Training Initiative (CITI)**

Texas A&M University-Commerce requires all individuals conducting/participating in research projects (including faculty, staff, postdocs, research assistants and students, etc...) that involves

human subjects to complete training for the Protection of Human Subjects and Responsible Conduct in Research. This requirement is met by the successful completion of the online training module from the Collaborative Institutional Training Initiative (CITI) website.

All individuals, principal investigators, co-investigators, post-docs, research assistants, undergraduate and graduate students and all other personnel engaged in research involving human subjects must complete the CITI training modules and quizzes with a minimum score of 80%. Successful completion of the course is required and the course may be repeated as necessary to achieve the 80% score. At the time of completion, a certificate can be printed by the trainee and notification is sent to the Office of Sponsored Programs.

The time to complete the training modules may be 2-4 hours. Individuals may exit and resume the training at anytime. Once successfully completed, a refresher course is required every two years. A notification will be sent to you prior to the expiration of your training. At anytime, you may return to the training modules and print a certificate.

Begin January 1, 2010, successful completion of the CITI modules (protection of human subjects and responsible conduct of research) is required before submission of the Institutional Review Board Protocol Form for the Protection of Human Subjects. Protocol forms will be reviewed only after the researcher has completed the CITI training.

Please follow the steps below to register and begin your training:

Link to <https://www.citiprogram.org/Default.asp?>

Click New Users Register Here
Select Texas A&M University-Commerce as your participating institution
Complete the remaining registration form
Select the Learner Group that applies to you

Biomedical Research Investigators
Social & Behavioral Research Investigators
IRB Members
Students conducting no more than minimal risk research
Research with data or laboratory specimens- ONLY

You are also required to complete the Responsible Conduct of Research module. Please select the appropriate module from the following:

Below are the links to the online training.

Human Subjects link:
<http://web.tamu-commerce.edu/academics/graduateSchool/humanSubjectsTraining.aspx>

Responsible Conduct in Research link:
http://www.tamu-commerce.edu/gradschool/research/responsible_conduct_training.asp

If you have questions please contact Ms. Mona Gilley at 903-886-5143 or Mona_Gilley@tamu-commerce.edu

Biomedical Responsible Conduct of Research Course
Social and Behavioral Responsible Conduct of Research Course
Physical Science Responsible Conduct of Research Course
Humanities Responsible Conduct of Research Course

Please contact the Office of Sponsored Programs if you have questions at 903-886-5161 or Ms. Mona Gilley for additional information.

Course Topics

1. Fundamentals of Research
2. Population Sampling
3. Types of Educational Research
4. Selecting a Problem and Preparing a Research Proposal
5. The Research Report
6. Evaluating a Research Report
7. Basic Research Designs, Ethical Consideration and Report Writing
8. Qualitative research
9. Methods and Tools of research
10. Data Analysis – Quantitative & Qualitative
11. Approaches to Educational Research Design

Course Assignments

1. **IRB Assignment**: Students will identify a research problem within your field of concentration and submit an IRB proposal for departmental review and consideration. Students should go to the graduate school website to obtain the documents for submitting the IRB Proposals Students should complete all components of IRB protocol and submit to the Departmental IRB Chairperson for review and consideration.
2. **Research Proposal Assignment**: Students will prepare an original proposal for a study relative to your own topic of interest. Students should use the criteria for critique of research articles to prepare your proposal. Your proposal will be assessed in terms of suitability for topic, focus of the research question, defensibility of the design, and scholarly writing. Instructor will provide a rubric with additional criteria
3. **Critique of Research Articles (5)**: Each student will select (5) five research articles from major research journals. Students will describe and critique the design, research questions, data analysis, and findings. See **Attachment A** for specific details on this assignment.
4. **Chapter Presentations**: Each student will select chapters from the text book – **Research and Education** and prepare a 2 – 3 page summary and reaction (power point

handout) to the key ideas in the chapter. Additionally, students will select chapters from the text - **Evaluation Research and Academic Journals**, read and present the key ideas/concepts that are covered in the chapter. Students will provide copies of the PowerPoint handout for all class members during their chapter presentation. Students are strongly encouraged to actively engage class members in their chapter presentation.

5. **Self Evaluation**: Each student will submit a final self – evaluation matrix that address each objective, each course requirement, and suggest a final grade.

Grading	Point Value
<u>Assignments</u>	
IRB (Human Subjects) Assignments	100
Critique of Research Articles	100
Research Proposal Assignment	100
Chapter Presentations	100
Total Points	400

Attachment A

Article Summary information for ELED 695

You are required to complete one Research article Summary during each class meeting, that are due as specified in the topical schedule and course syllabus. The requirements for each summary are as listed below:

Summarize a professional journal article that relates to Research. As a minimum, the summary should be in APA. You can find the basic information for formatting on the web. The article summary and style should contain the following elements:

- A cover page: including your name and the citation of the article.
- Maximum 2 page summary of the article (Abstract)
- One or two page critical analysis of article, this is **your** critical analysis. The format for the analysis follows.
- The article review must be submitted using MS Word in PC format
- The entire summary with cover page should not exceed **five** pages.
- Please attach copy of article
- You should turn in your articles **one per week** during the semester.

- In this assignment, please limit your selection to articles using quantitative analysis.

Format for Critical Analysis (Some of the categories may not apply – Just say that they don't apply and why you don't think so)

I. PROBLEM

1. What is the problem?
2. What is the significance of the problem?
3. What are the variables, Dependent and Independent?

II. HYPOTHESIS, SAMPLE, INSTRUMENTS, DESIGN

4. What is/are the hypothesis/es?
5. How was the sample selected? Is it likely to be unbiased? Why or why not?
6. Are the instruments appropriate? Why or why not?
7. What is the design of this study? Is it the best design possible for testing the hypotheses? Why or why not?

III. DATA, METHOD, RESULTS, CONCLUSION, RECOMMENDATIONS

8. Describe the data used to test the hypotheses.
9. What method of analysis was used?
10. What did the Researcher conclude from the results of this study? Are the conclusions warranted by the results?
11. Can you point to any generalizations, implications, recommendations, and/or further research needs that were not discussed by the author?
12. What do you think of this study in general and why? That is, do you think the study is good/bad, important/not important, interesting/not interesting, makes sense/does not make sense? Would you act on basis of it? Why?

TECHNOLOGY REQUIREMENTS

This is not an Online Course but some technological resources will be required.

Access to a Computer with

- Internet Access.
- Microsoft Word Processing Software.
- Microsoft Power Point Software.
- Adobe or Foxit Reader to open PDF File.

ACCESS AND NAVIGATION

Dr. Brown will send email attachments of all readings relating to research topics.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement:

Participation & Communication: Each of you are expected to participate fully in assigned readings related to course topics, chapter presentations, discussions of current articles, and presentations of math science lessons. Your active and thoughtful participation is expected in course assignments. Regular attendance is necessary and will be expected of all students.

In regards to communication, please use my email (David.Brown@tamuc.edu) to correspond with me regarding class matters. Also, I will be happy to schedule individual appointments with you, if needed. Also, I will post readings on my website for individual assignments. Students will be provided information to access documents on the website.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures:

Citizenship: All Students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student 92s Guide Handbook, Policies and Procedures, Conduct).

Late Work: Late work is not accepted. You will have plenty of notification and time to complete course assignments. If you know you are going to be out of town and unable to access a computer, Plan ahead. Instructor will provide topical schedule noting dates for all course assignments

Plagiarism: Plagiarism **WILL NOT** be tolerated and will result in an automatic **F** in the course. Various versions of your work and final papers will be run through Turnitin software – this is not meant to “catch” you in the act, but rather assist you in seeing possible areas that may be unintentionally plagiarized and allow for editing your work.

Attendance: Attend all classes. Arrive on time and remain until class is dismissed. Class meets from 04:30 PM until 10:00 PM on alternate Wednesdays unless noted otherwise by the instructor. If you must miss a class due to a professional responsibility and know ahead of time, discuss this with the instructor on the first night of class to create a make-up plan. If you must miss a class due to an unforeseen excused absence or professional responsibility, email or leave a telephone message for the instructor before class, then give the instructor a written plan for make-up work at the beginning of the next class session. You must discuss this plan with the instructor and gain his approval to receive make-up credit. Each unexcused absence will lower your final average score by 10 points. For a definition of an excused absence, please see the Texas A&M University-Commerce Catalog or Student’s Guidebook.

Cell Phones/Computers: Please respect the instructor and your peers by turning off your cell phones and other technical devices during chapter presentations, unless you have notified me

at the beginning of class that you have a critical family situation about which you must be notified. This should constitute only emergencies.

Scholarly Expectations: All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level.

University Specific Procedures:

ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

References

Kamil, Michael, and et al(2000) Handbook of Reading Research, Volume III, Lawrence Erlbaum Associates, Mahwah, New Jersey.

Wagner, Billy (2006) Using SPSS for Social Statistics and Research Methods, SAGE Publications.

Koshy, Valsa (2005) Action Research for Improving Practice, A Practical Guide, SAGE Publications.

Robert-Homes, Guy (2005) Doing Your Early Years Research Project, A Step by Step Guide, Paul Chapman Educational Publishing

Suter, W. Newton (2005) Introduction to Educational Research, A Critical Thinking Approach, SAGE Publications.

Mertlet, A. Craig (2005) Action Research, Teachers as Researchers in the Classroom, SAGE Publications.

Lichtman, Marilyn (2006) Qualitative Research in Education, A User's Guide, SAGE Publications.

Rossman, B. Gretchen and Marshall, Catherine (2006) Designing Qualitative Research, 4th Edition, SAGE Publications.

Kuin, Lai Mein and Robinson, Viviane (2005) Practitioner Research for Educators, A Guide to Improving Classrooms and Schools, Corwin Press.

Joyner, L. Randy and Glatthorn, A. Allan (2005) Writing the Winning Thesis or Dissertation, A Step-by-Step Guide, Corwin Press.

Muijs, Daniel (2004) Doing Quantitative Research in Education, with SPSS, SAGE Publications.

Thomas, J. Susan (2004) Using Web and Paper Questionnaires for Data-Based Decision Making, From Design to Interpretation of the Results, Corwin Press

Recommended Texts

Pan, Ling M (2008) Preparing Literature Reviews: Qualitative and Quantitative Approaches (2nd Edition) Pyrezak Publishing, Los Angeles, California (ISBN – 1-884585-76-0)

Silverman, David (2005) Doing Qualitative Research, (2nd Edition) Sage Publications, Thousand Oaks, California.

Pattern, Mildred L (2001) Questionnaire Research: A Practical guide (2nd Edition) Pyrezak Publishing, Los Angeles California

Adelheid A. M. Nicol and Penny M. Pexman “**Presenting Your Findings**” *A Practical Guide for Creating Tables.* **American Psychological Association. (Washington D.C)**

Adelheid A. M. Nicol and Penny M. Pexman “**Displaying Your Findings**” *A Practical Guide for Creating Figures, Posters, and Presentations.* **American Psychological Association. (Washington D.C)**

Recommended Research Journals:

- Reading Research Quarterly
- Early Childhood Research Quarterly
- Educational Researcher
- Child Development
- Journal of Science Education & Technology
- School Science and Mathematics

- Journal of Educational Psychology
- Journal of Research in Childhood Education
- Review of Educational Research
- Developmental Psychology
- Journal of Research in Adolescence
- Journal of Experimental Child Psychology
- Educational Research Quarterly
- Educational Research and Evaluation
- Elementary School Journal
- Journal of Educational Research
- Journal of Adolescent Research
- Journal of Abnormal Child Psychology
- Applied Developmental Science
- Journal of Child and family studies
- Remedial and Special Education
- Journal of Learning Disabilities
- The Journal of Experimental Education
- Journal of Literacy Research
- Early Childhood Research and Practice

COURSE OUTLINE / CALENDAR

A topical course schedule will be developed collaboratively in class during our first meeting.