I. COURSE DESCRIPTION

This graduate level course is offered in support of graduate degree programs in the College of Education. It is designed to introduce the fundamentals of research in education. Students will explore what research involves, the various types of educational research, the techniques for conducting research studies, ethical behavior in the conduct of research, and research in educational settings. Descriptive and inferential statistics will be presented in the context of the research study. Social issues related to educational research will also be discussed.

II. RATIONALE

With the current push for accountability and evidence-based practices in the field of education, educators are increasingly expected to be active consumers of research. It is therefore important that students of education know and understand the elements of research in order to be able to critically evaluate and/or conduct research. This course will provide the students with a basic framework for understanding and evaluating educational research. It will also provide knowledge of the various types of research designs and the procedures for conducting research. The course is applicable for all students who will conduct research or make professional use of educational research.

III. STATE ADOPTED PROFICIENCIES FOR TEACHERS AND/OR ADMINISTRATORS/CONUNSELORS

The following state adopted proficiencies for mid-management administrators are covered in this course.

- Learner-Centered Leadership
- Learner-Centered Professional Development

IV. TExES COMPETENCIES - NA
V. COURSE OBJECTIVES/LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to demonstrate knowledge and understanding of:

1. The historical and social antecedents of educational research.
2. The basic skills required to comprehend and apply educational research in a variety of educational settings.
3. The professional skills and competencies that educational researchers and users of educational research must master.
4. The basic measurement, statistical, and research skills needed to understand and conduct research.
5. The different types of research designs and their appropriate usage.
6. Ethical standards and considerations in conducting research.

The course is also designed to meet the following CACREP Standards II-G-8-a-f:

RESEARCH AND PROGRAM EVALUATION—studies that provide an understanding of research methods, statistical analysis, needs assessment, and program evaluation, including all of the following:

a. The importance of research in advancing the counseling profession;
b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research;
c. statistical methods used in conducting research and program evaluation;
d. principles, models, and applications of needs assessment, program evaluation, and the use of findings to effect program modifications;
e. the use of research to inform evidence-based practice; and
f. ethical and culturally relevant strategies for interpreting and reporting the results of research and/or program evaluation studies.

Major Learning Outcomes
• Students will have the knowledge and understanding of research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research.

Secondary Learning Outcomes
• Students will have the knowledge and understanding of statistical concepts, including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations.
  • Students will have the knowledge and understanding of the importance of research in advancing the counseling profession.
  • Students will have the knowledge and understanding of statistical methods used in conducting research and program evaluation.
  • Students will have the knowledge and understanding of the use of research to inform evidence-based practice.
  • Students will have the knowledge and understanding of the principles, models, and applications of needs assessment, program evaluation, and the use of findings to effect program modifications.


- Students will have the knowledge and understanding of the use of research to inform evidence-based practice.
- Students will have the knowledge and understanding of ethical and culturally relevant strategies for interpreting and reporting the results of research and/or program evaluation studies.

**VI. TOPICAL OUTLINE**

Unit 1 – Understanding Basic Statistics and Data Analysis  
Unit 2 – Literature Review  
Unit 3 – Sampling  
Unit 4 – Validity and Reliability  
Unit 5 – Basic Concepts in Educational Research and Program Evaluation  
Unit 6 – Types of Educational Research  
Unit 7 – Experimental Design  
Unit 8 – Understanding Empirical Research Reports

**VII. TENTATIVE CLASS SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/18</td>
<td>Course Introduction, Part G</td>
<td>Lecture notes, Part G, Part B</td>
</tr>
<tr>
<td>1/25</td>
<td>Part G</td>
<td>Lecture notes, Part G, Part B</td>
</tr>
<tr>
<td>2/1</td>
<td>Part G</td>
<td>Lecture notes, Part G, Part C</td>
</tr>
<tr>
<td>2/8</td>
<td>Part G</td>
<td>Lecture notes, Part I, Part J</td>
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<tr>
<td>2/15</td>
<td>Part G</td>
<td>Lecture notes, Part G, Part C</td>
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<tr>
<td>2/22</td>
<td>Part G</td>
<td>Part B</td>
</tr>
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<td>3/1</td>
<td>Quiz 1, Part A</td>
<td>Lecture notes, Part A</td>
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<tr>
<td>3/8</td>
<td>Part B</td>
<td>Lecture notes, Part A, Part C</td>
</tr>
<tr>
<td>3/15</td>
<td>Spring Break</td>
<td>Term project</td>
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<tr>
<td>3/22</td>
<td>Project Topic Presentation¹</td>
<td>Part H</td>
</tr>
<tr>
<td>3/29</td>
<td>Part A, Part D</td>
<td>Term project</td>
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<tr>
<td>4/5</td>
<td>Part C</td>
<td>Lecture notes, Part C, Part H</td>
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<tr>
<td>4/12</td>
<td>Part D, Part E</td>
<td>Lecture notes, Part D, Part E</td>
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<td>4/19</td>
<td>Part J</td>
<td>Lecture notes, Part F, Part J</td>
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<tr>
<td>4/26</td>
<td>Part E</td>
<td>Lecture notes, Part E</td>
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<td>5/3</td>
<td>Reading Day-No Class</td>
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<tr>
<td>5/10</td>
<td>Quiz 2</td>
<td>Lecture notes, Part F</td>
</tr>
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</table>

Note: The instructor reserves the right to modify this syllabus during the semester, if needed.  
¹Students may not change their research topics after this date.
VIII. INSTRUCTIONAL METHODS AND ACTIVITIES

1. Lecture/discussion
2. Practice problems
3. Individual homework assignments
4. In-class group assignments
5. Critique of a research article
6. Term project

IX. EVALUATION AND GRADE ASSIGNMENT

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and Class Participation</td>
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</tr>
<tr>
<td>Homework Assignments¹</td>
<td>6%</td>
</tr>
<tr>
<td>Small Group Presentation</td>
<td>10%</td>
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<tr>
<td>Quiz 1</td>
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<tr>
<td>Quiz 2</td>
<td>27%</td>
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<tr>
<td>Term Project²</td>
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<tr>
<td>In-Class Research Topic Presentation</td>
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<tr>
<td>Two visits to the Campus Writing Center</td>
<td>3%</td>
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<tr>
<td>Final Proposal</td>
<td>12%</td>
</tr>
</tbody>
</table>

Note: 
1 Most of the homework assignments may be submitted online.
2 For the class project, the student is to design a study to investigate an issue of importance in his/her field. More details on the project will be provided in class.

Grading Scale:
90 – 100 A
80 - 89 B
70 - 79 C
60 - 69 D
< 60 F

X. REQUIRED TEXTBOOK


XI. RECOMMENDED READINGS

XII. COURSE POLICIES

Late work and Make-up Exams

Late assignments are not accepted except in extenuating circumstances at the discretion of the instructor. Students who find that they are unable to be at an examination session because of illness, extenuating circumstances, etc., should contact the instructor as soon as the condition becomes apparent to arrange fair and practical extensions.

Incomplete Grade

An incomplete notation may be given to a student who is passing but has not completed a term paper, examination, or other required work for reasons beyond the student’s control other than lack of time.

Academic Integrity/Plagiarism.

University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in receiving an “F” in the course.

Dropping a Class

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with me before you decide to drop to be sure it is the best thing to do. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class.

Grade Appeals

As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a
complaint about a grade is encouraged to first discuss the matter with the instructor. For complete
details, including the responsibilities of the parties involved in the process and the number of days
allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade
Appeals, and University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents
are accessible through the University Rules Web site at
http://www.tamucc.edu/provost/university_rules/index.html. For assistance and/or guidance in the grade
appeal process, students may contact the Office of Student Affairs.

Disabilities Accommodations

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 believe you have a disability requiring an
accommodation, please call or visit Disability Services at (361) 825-5816 in Driftwood 101.
If you are a returning veteran and are experiencing cognitive and/or physical access issues in the
classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.