

Fall 2007
CNE 579 METHODS OF RESEARCH

Sam Houston State University
College of Education and Applied Sciences
Department of Educational Leadership & Counseling

INSTRUCTOR:

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Enhancing The Future
Through Educator Preparation

REQUIRED TEXT(S):

1. Gay, L.R. & Airasian, P. (2006). *Educational research: Competencies for analysis and applications* (8th ed.). Upper Saddle River, NJ: Prentice Hall.
3. American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.) Washington, DC: American Psychological Association.
4. SPSS 14.0 or later (statistical package) to be included with text and student guide.

Course Objectives The student will:

1. Demonstrate an understanding of the research process and methodology.
2. Identify and define a researchable problem, review related literature, and state the problem in terms of testable hypotheses or researchable questions.
3. Produce a research plan, and state reasons for its importance.
4. Demonstrate an understanding of the basics of sampling theory and related subject-selection techniques.
5. Demonstrate knowledge of criteria for evaluation and selection of test instruments and can apply this knowledge to a research problem of their own.
6. Describe the procedures involved in each of the types of research and can discriminate between the types of research. Use a type of research design to complete a research project.
7. Select and calculate, as appropriate, the following statistics: mean, standard deviation, z scores, t tests, ANOVA, Chi Square, and Pearson Product Moment Correlation. Use a statistical package such as SPSS for calculating these statistics.
8. Identify research problems requiring statistical application and demonstrate an understanding of the results.
9. Make critical evaluations of published research and judge the generalizability of a given study.
10. Develop the ability to use library resources for research purposes.
11. Learn to distinguish research and research reviews and other opinion-based writings.
12. Use technology for assignments (Blackboard, e-mail, Power Point, SPSS, internet, video conferencing, etc.

13. Learn a proper style for writing research material (APA style is required).
14. Demonstrate an understanding of ethical procedures in conducting research.

IDEA OBJECTIVES:

Essential:

- Gaining factual knowledge (terminology, classifications, methods, trends).
- Learning how to find and use resources for answering questions or solving problems.
- Developing skill in expressing oneself orally or in writing.

Important:

- Learning to *apply* course material (to improve thinking, problem solving, and decisions).
- Learning to *analyze* and *critically evaluate* ideas, arguments, and points of view.

MEANS OF EVALUATION

<u>ASSIGNMENT</u>	<u>Point Value</u>	<u>DUE DATE (Midnight)</u>
Crossword Puzzle Chapter 1	5	Sat, Sept 8
Crossword Puzzle Chapter 4	5	Sat, Oct 6
Crossword Puzzle Chapter 5	5	Sat, Oct 20
Crossword Puzzle Chapter 7	5	Mon, Oct 29
Crossword Puzzle Chapter 9	5	Sat, Nov 10
Crossword Puzzle Chapter 11	5	Wed, Nov 14
Crossword Puzzle Chapter 12	5	Mon, Nov 26
Numerical Homework Chapter 5	5	Wed, Oct 17
Numerical Homework Chapter 7	15	Wed, Oct 31
Numerical Homework Chapter 11	15	Wed, Nov 14
Numerical Homework Chapter 12	15	Wed, Nov 28
Test Chapter 1	20	Sun, Sept 9
Test Chapter 2	20	Sun, Sept 16
Test Chapter 3	20	Sun, Sep 23
Test Chapter 4	75	Sun, Oct 7
Test Chapter 5	100	Sun, Oct 21
Test Chapter 7	125	Sun, Nov 4
Test Chapter 9	65	Sun, Nov 11
Test Chapter 11	130	Sun, Nov 18
Test Chapter 12	150	Sun, Dec 2
Test Chapter 13	50	Wed, Dec 12
Research Paper Content	75	Thur, Dec 6 at 11 pm
APA Style of Research Paper	75	Thur, Dec 6 at 11 pm
Discussion Board	<u>10</u>	(Based on discussion board for the semester)
TOTAL:	1,000	

GRADING SCALE

A = 899.91 – 1,000 Points
B = 799.90 – 899.90 Points
C = 699.90- 799.91 Points
F = 699.89 Points or below

All grades are given to two decimal places. Even if a grade may not be listed with two decimal places, this should be implied.

Please note that the grading scale above is very specific. If you have, for example, 799.87 points at the end of the semester, you will receive a final grade of a “B”. There will be no extra credit assignments given, nor any additional rounding up of grades.

Historically among the lowest grades are on the first examination (students are not prepared for how difficult the material is) and on the APA Style of Research Paper (this takes a great deal of time). I would highly recommend that students visit the Writing Center for help with grammar and APA Style. Those who do seem to do *much* better. I reduced the first examination from the historical 60 points down to 20 points so students can get familiar with the format without experiencing “grade shock”.

NOTE: The Research Project must be 100% complete in order to receive an “A” in this class. This means that all sections must be complete.

You are encouraged to initiate new threads at any time on the Discussion Board if you do not understand any of the material. I will be reading threads. If you do not feel you still understand the material, please send me an email. First click the “MESSAGES” icon under “Course Tools” (upper right hand corner of Course Tools). Then click on New Message. If you do not hear back from me soon, feel free to email me directly at wiesner@shsu.edu I prefer you not email me directly at first try because all messages are neatly organized within the Blackboard course if you use the messages icon on Blackboard,

HOWEVER, if you a in a time crunch then responding to me directly will usually get a quicker response. Best to stay well ahead of schedule of course because then other students can help you and you can help them using the Discussion Board. Also other students can learn from viewing the Discussion Board dialogue. I urge you to set up a calendar of due dates in a prominent place where you can keep up with due dates. If you wait until the last minute to take the tests then you will not have as much time to get help before the test.

READING ASSIGNMENTS

Educational research: Competencies for analysis and applications (8th ed.) Required reading:

- Chapter 1 page 3 – 19
- Chapter 2 page 56.5 – 61
- Chapter 3 page 73 – 78.8
- Chapter 4 page 99 – 117
- Chapter 5 page 121 – 154
- Chapter 7 page 191 – 207
- Chapter 9 page 233 – 246
- Chapter 11 page 301 – 334
- Chapter 12 page 337 – 382
- Chapter 13 page 383 – 397

STANDARDS MATRIX

The following abbreviations will be used: CO= Course Objectives, CA = CACREP objectives, SB = SBEC and NC = NCATE competencies and standards.

Date/Objectives/ Learning Outcomes	Activities (See Activities List Attached for additional information; - G = group, A = alone, Pts. needed)	Performance Assessment	Standards
--Demonstrate an understanding of the research process and methodology. 8a. Research and Program Evaluation - Studies that provide an understanding of research methods, statistical analysis, needs assessment, and program evaluation, including the importance of research and			CA -K8a, K8f SB - Domain II, 007 NA - 1,2

opportunities and difficulties in conducting research in the counseling profession. 8f. Ethical and legal considerations.			
2 -- Identify and define a researchable problem, review related literature, and state the problem in terms of testable hypotheses or researchable questions. -- Develop the ability to use library resources for research purposes. 8b. Research Methods such as qualitative, quantitative, single case designs, action research, and outcome based research 8f. Ethical and legal considerations.			CA -K 8b, K 8f SB - Domain III 010 NA- Standard 2 ,4
Produce a research plan and state reasons for its importance. 8c. Use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy. 8f. Ethical and legal considerations			CA -K 8c, K 8f SB - I (003) NA - Standards II 3,4)
Produce a research plan and state reasons for its importance. 8d. Principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modifications. 8f. Ethical and legal considerations			CA -K 8d, K 8f SB - III (007) NA - Standards II (3.4)
Produce a research plan and state reasons for its importance. 8d. Principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modifications. 8f Ethical and legal considerations.			CA -K 8d, K 8f SB - I (002) NA - I (2)
Demonstrate an understanding of the basics of sampling theory and related subject-selection techniques. 8e. Use of Research to improving counseling effectiveness 8f Ethical and legal considerations.			CA -K 8e, K 8f SB - III (009) NA - Standards

			1, 2, 4
<p>-- Demonstrate knowledge of criteria for evaluation and selection of test instruments and can apply this knowledge to a research problem of their own.</p> <p>8e. Use of Research to improving counseling effectiveness.</p> <p>8f Ethical and legal considerations.</p>			<p>CA K 8e, K 8f SB- III NA - Standards 1, 2, 4</p>
<p>Describe the procedures involved in each of the types of research and can discriminate between the types of research. Use a type of research design to complete a research project.</p> <p>8d. Principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modifications.</p> <p>8f Ethical and legal considerations.</p>			<p>CA -K8d, K8f SB - III (007) NA - Standards 1, 2, 4</p>
<p>-- Select and calculate, as appropriate, the following statistics: mean, standard deviation, z-scores, t tests, ANOVA, Chi Square, and Pearson Product Moment Correlation. Use a statistical package such as SPSS for calculating these statistics.</p> <p>8c. Use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy.</p> <p>8f Ethical and legal considerations.</p>			<p>CA - K8c, K8f SB -III (007) NA 1, 2, 4</p>
<p>--Use a type of research design to complete a research project.</p> <p>8c. Use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy.</p> <p>8f Ethical and legal considerations.</p>			<p>CA -K 8c, K 8f SB -III (007) NA 1, 2, 4</p>
<p>-- Select and calculate, as appropriate, the following statistics: mean, standard deviation, z-scores, t tests, ANOVA, Chi Square, and Pearson Product Moment</p>			<p>CA -K8c, K 8f SB - III (007)</p>

Correlation. Use a statistical package such as SPSS for calculating these statistics. 8c. Use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy. 8f Ethical and legal considerations.			NA 1, 2, 4
-- Select and calculate, as appropriate, the following statistics: mean, standard deviation, z-scores, t tests, ANOVA, Chi Square, and Pearson Product Moment Correlation. Use a statistical package such as SPSS for calculating these statistics. 8c. Use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy. 8f Ethical and legal considerations.			CA -K 8c, K8f SB - III (007) NA 1, 2, 4
-- Select and calculate, as appropriate, the following statistics: mean, standard deviation, z-scores, t tests, ANOVA, Chi Square, and Pearson Product Moment Correlation. Use a statistical package such as SPSS for calculating these statistics. 8c. Use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy. 8f Ethical and legal considerations.			CA -K 8c, K8f SB - III (007) NA 1, 2, 4
-- Learn a proper style for writing research material (APA is required). 8f Ethical and legal considerations.			CA -K 8 f SB - III (007) NA - 1, 2, 4

Web addresses for standards:

CACREP : <http://www.counseling.org/cacrep/2001standards700.html>

SBEC: Standards for the School Counselor Certificate

[http://info.sos.state.tx.us/pub/plsql/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc](http://info.sos.state.tx.us/pub/plsql/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc)

NCATE: <http://www.ncate.org>

The agency counseling program offered by the Counselor Education faculty is a CACREP accredited. The program accreditation does not require renewal until October 31, 2014.

According to the 2001 Standards of the Council for Accreditation of Counseling and Related Educational Programs (CACREP), curricular experiences and demonstrated knowledge in each of the eight common core areas are required of all students in the program. The following objectives as delineated in the 2001 CACREP Standards are focused upon using the methods following each objective and in the approximate time frame given.

7. ASSESSMENT - studies that provide an understanding of individual and group approaches to assessment and evaluation, including all of the following:

- b. basic concepts of standardized and nonstandardized testing and other assessment techniques including norm-referenced and criterion-referenced assessment, environmental assessment, performance assessment, individual and group test and inventory methods, behavioral observations, and computer-managed and computer-assisted methods;

Chapter 5 Selecting Measuring Instruments [types of measuring instruments]

- c. statistical concepts, including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, and correlations;

Chapter 5 Selecting Measuring Instruments [measuring scales and variables]

- d. reliability (i.e., theory of measurement error, models of reliability, and the use of reliability information);

Chapter 5 Selecting Measuring Instruments [reliability of measuring instruments; standard error of measurement]

- e. validity (i.e., evidence of validity, types of validity, and the relationship between reliability and validity);

Chapter 5 Selecting Measuring Instruments [validity of measuring instruments]

- f. age, gender, sexual orientation, ethnicity, language, disability, culture, spirituality, and other factors related to the assessment and evaluation of individuals, groups, and specific populations;

Chapter 5 Selecting Measuring Instruments

- g. strategies for selecting, administering, and interpreting assessment and evaluation instruments and techniques in counseling;

Chapter 5 Selecting Measuring Instruments [consequential validity]

- i. ethical and legal considerations.

Supplemented by lecture

8. 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 and opportunities and difficulties in conducting research in the counseling profession,

Chapter 1 – Introduction to Educational Research (page 3 – 8)

- b. research methods such as qualitative, quantitative, single-case designs, action research, and outcome-based research;

Chapter 1 pages 9 -16

Chapter 2 pages 56 – 61 Hypotheses

Chapter 9 - Experimental Research

Chapter 11 – Descriptive Research

Chapter 12 – Inferential Research

Chapter 13 – Postanalysis Considerations

- c. use of technology and statistical methods in conducting research and program evaluation, assuming basic computer literacy;

Chapter 7 Correlational Research

Library Presentation by Library Science Personnel - Databases

Chapter 4 Selecting a Sample

- d. principles, models, and applications of needs assessment, program evaluation, and use of findings to effect program modifications;

Textbook Chapter 1 [Action research]

- e. use of research to improve counseling effectiveness; and

Students' research projects may include this.

- f. ethical and legal considerations.

Chapter 3 The Ethics of Research pages 73 – 78

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed. For a complete listing of the university policy, see:

http://www.shsu.edu/~vaf_www/aps/documents/861001.pdf

ACADEMIC DISHONESTY

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource

materials. For a complete listing of the university policy, see:
<http://www.shsu.edu/administrative/faculty/sectionb.html#dishonesty>

Under no circumstances are you to disclose to or discuss with other students in this class (past, present, or future):

- 1) The general or specific nature of the content of any examination in this class.**
- 2) The specific answers of numerical homework assignments in this class.**
- 3) Answers to crossword puzzles.**
- 4) Responses to use in any discussion board forums.**
- 5) DO NOT COPY/PASTE ANY PORTION OF THE EXAM. THIS GENERATES A RESPONSIS REPORT FROM THE PLATFORM AND WILL RESULT IN A NO CREDIT GRADE FOR THE EXAM.**

Per University Policy, the result of academic dishonesty (includes plagiarism) can be failure of the assignment and of the course. My policy is to award zero points for the assignment and possibly a failing grade for the course.

STUDENTS WITH DISABILITIES POLICY:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance are expected to visit with the Office of Services for Students with Disabilities located in the Counseling Center. They should then make arrangements with their

individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Counseling Center. For a complete listing of the university policy, see:

http://www.shsu.edu/~vaf_www/aps/811006.html

Assignment Due Dates & Late Penalties

IF ANY ASSIGNMENT IS TURNED IN LATE, SEND ME AN EMAIL STATING IT IS LATE. This alerts me so I can change the grade manually.

You may and are encouraged to finish these assignments before due dates. The due dates are required to keep you at the fast pace that we must go at in a summer session and I cannot give you specific grade feedback on assignments until everyone has completed an assignment. There will be a 50% penalty of the available points for every 24 hour period past the due date for Numerical Homework Assignments. There will be a 25% penalty of the available points for every 24 hour period past the due date for Examinations and for Crossword Puzzles. This penalty helps you keep up and allows everyone to get feedback in a timely fashion. Please keep up with the due dates. If you move at a faster pace you will avoid missing deadlines. I urge you to keep these dates marked down several places where you will be reminded. If the date conflicts with something you would want to finish the assignment early.