



**Instructor: Julie Combs, Ed.D.**  
Course Syllabus ASE 579 Methods of Research  
Fall 2007  
Mondays 6:00-8:50, Spring

## **I. Instructor Information**

A. Julie Combs has served as an assistant professor of Educational Leadership for the past 5 years. Dr. Combs has worked in a variety of administrative and teaching roles in a Texas suburban school district and served as a building administrator for 10 years. She had the responsibility of opening a new building and five years later the school was recognized as a National Blue Ribbon winner. In addition to teaching and researching, she consults with school districts, providing staff development on topics such as public relations, communication, and leadership. Additionally, she conducts program evaluations for externally funded programs. Her current research interests include trust and leadership, the roles and duties of principals, leadership burnout, expectations of adult learners, and teaching Research Methods. She has presented at several national and state conferences and has 10 published articles and chapters.

### **B. Contact Information**

Office: 936-294-3181      Fax: 936-294-3886      Office: 319P  
Email: [jcombs@shsu.edu](mailto:jcombs@shsu.edu) (same as [jpc002@shsu.edu](mailto:jpc002@shsu.edu))  
Office Hours: By appointment. Students are invited to schedule individual appointments during the semester.

### **C. Philosophy of Teaching, Learning, and Evaluation**

I believe that learning is facilitated by an instructor that offers a learning environment with opportunities for risk-taking and challenge. Students will be invited to set personal learning goals and share materials to support inquiry. Class meetings are planned to include discussions and activities that facilitate the application of reading materials and content; therefore, background reading and assignments should be completed prior to class.

Most of the classroom evaluations will be for formative purposes; hence, frequent feedback will be given. Students are encouraged to contact me with questions or concerns. The summative evaluation resulting in the assignment of the course grade is based on a variety of factors. The summative evaluation (course grade) includes my professional judgment regarding the following: quality of work submitted, mastery of course objectives, regular attendance, active participation, timely completion of assignments, and respectful interactions with others.

Work that *meets expectations* for graduate level work will receive a B. The final grade of an A will be earned by students that demonstrate work that exceeds expectations in quantity, quality, and levels of thought and application for graduate level work.

“Knowing it not enough; we must apply. Willing is not enough; we must do.” Goethe (pronounced goota)

## **II. Course Description & Objectives**

A. Course Description (*SHSU 2005-07 Graduate Catalog*, p. 171)

*Study is made of types and methods of educational research, the collecting, analyzing, and sharing of data with the public. The student is expected to complete a research project or field study utilizing appropriate methods of educational research. Credit 3 hours.*

This course provides an overview of major methodological concepts, tools, and principles used in contemporary educational research. Through reading, writing, and discussions the course emphasizes skill development in locating, evaluating, and interpreting educational research for the purpose of school improvement.

This course has three main goals: (1) to increase your understanding of research concepts and procedures, (2) to develop your appreciation of the importance of research in education, and (3) to develop your skill in preparing a research proposal.

Research typically involves several stages including planning (e.g., the dissertation proposal), conducting a pilot study, developing measurement tools, collecting data, analyzing data, and sharing the findings in written summaries. This course is designed to develop the knowledge and skills needed to conduct research at an emerging level of proficiency. These skills will be refined through planning and practice in doing research, guided by an experienced researcher.

B. Course Objectives

Course objectives & Performance Measures:

1. To understand basic research concepts;
2. To locate information using a variety of resources;
3. To demonstrate multiple approaches to data collection and analyses;
4. To understand the purposes of qualitative and quantitative research;
5. To identify experimental, descriptive, correlational, and qualitative research methods;
6. To recognize the application of research ethics and the protection of subjects;
7. To appreciate the relationship between theory, research, and practice; and
8. To demonstrate application of course concepts by conducting a research project.

As required by the Texas Education Code (TEC), the following Standards for the Principal Certificate are addressed:

Domain I- School Community Leadership: Competency 003 Values and Ethics

The principal knows how to act with integrity, fairness, and in an ethical and legal manner.

The principal knows how to:

- Model and promote the highest standards of conduct, ethical principles, and integrity in decision-making actions, and behaviors.
- Apply knowledge of ethical issues affecting education.
- Serve as an advocate for children.
- Promote the continuous and appropriate development of all students.

Domain II- Instructional Leadership: Competency 004

The principal knows how to facilitate the design and implementation of curricula and strategic plans that enhance teaching and learning; ensure alignment of curriculum, instruction, resources, and assessment; and promote the use of varied assessment to measure student performance.

The principal knows how to:

- Facilitate the effective campus curriculum planning based on knowledge of various factors (e.g. emerging issues, occupational and economic trends, demographic data, student learning data, motivation theory, teaching and learning theory, principles of curriculum design, human developmental processes, legal requirements).

- Facilitate the use of sound research-based practice in the development, implementation, and evaluation of campus curricular, co-curricular, and extracurricular programs.

Domain II- Instructional Leadership: Competency 005

The principal knows how to advocate, nurture, and sustain an instructional program and a campus culture that are conducive to student learning and staff professional growth.

The principal knows how to:

- Facilitate the development of a campus learning organization that supports instructional improvement and change through ongoing study of relevant research and best practice.
- Facilitate the implementation of sound research-based instructional strategies, decisions, and programs in which multiple opportunities to learn and be successful are available to all students.
- Facilitate the implementation of sound research-based theories and techniques of teaching, learning, classroom management, student discipline, and school safety to ensure a campus environment conducive to teaching and learning.
- Analyze the implications of various factors (e.g., staffing patterns, class scheduling formats, school organizational structures, student discipline practices) for teaching and learning.

### C. IDEA Objectives

Students will be asked to evaluate the instructor's teaching effectiveness related to course objectives described below and general effective teaching practices at the end of the course. Students are encouraged to provide feedback during the course which will be used to make needed adjustments.

1. Gaining factual knowledge (terminology, classifications, methods, trends) [Essential Objective]
2. Developing skill in written and oral expression. [Essential Objective]
3. Learning how to find and use resources for answering questions or solving problems. [Important Objective]
4. Learning to analyze and critically evaluate ideas, arguments, and points of view. [Important Objective]

## III. Materials

### A. Required Texts: Bring to each class

Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational research: Competencies for analysis and applications* (8<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall. ISBN 013 118 5349

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5<sup>th</sup> ed.). Washington, DC: Author. ISBN 155 798 8102

### B. Required Tools

1. Students should have access to a reliable Internet connection and be familiar with basic Microsoft software programs including Word, PowerPoint, and Excel. In addition, students will need to establish a SHSU student email account (see [http://www.shsu.edu/~ucs\\_www/](http://www.shsu.edu/~ucs_www/)) in order to utilize the reference collections and SPSS software via a remote connection.

2. Blackboard: Students will be expected to utilize Blackboard for assignments, discussion boards, and announcements. Please visit <http://www.shsu.edu/administrative/training/guides/blackboard.html> for training guides and on-line tutorials.

3. Please become familiar with the resources managed by the Newton Gresham Library by visiting the website: <http://library.shsu.edu/>

### C. Prerequisite Knowledge

1. Prerequisite Concepts for Research Methods

Students enrolled in ASE 579 should be familiar with the following concepts and terms prior to the first or second class: scientific method, instruments, deductive logic, inductive reasoning, percentages, means, and frequency counts.

## 2. Academic Writing Expectations

In addition, students at the graduate level will be expected to write well-organized manuscripts with correct grammar, spelling, usage, punctuation, and organization. Final submissions should be error-free. To achieve this standard, students will be expected to review, revise, and edit work multiple times.

## IV. Course Requirements & SHSU Policies see also: <http://www.shsu.edu/syllabus/>

A. Academic Honesty: Academic work submitted by you (such as papers, assignments, reports, tests) shall be your work alone and referenced in part or in whole to its correct source. Submission of commercially prepared (or group prepared) materials as your own work is unacceptable. Moreover, you shall encourage honesty in others by refraining from providing materials or information with knowledge that these materials or information will be used improperly. Violation of these academic standards may result in program removal or failure. Academic Policy Statement 810213

1. Students are expected to use conventions noted in the *Publication Manual of the American Psychological Association*, 5th edition, for citing sources.

2. Papers and reports will be submitted electronically and may be evaluated for originality of content and accuracy of quotes and paraphrasing. Plagiarized work will automatically receive a failing grade.

B. Each faculty member will announce to his/her classes the policies for accepting late work. Academic Policy Statement 800401 *The policy for this class is as follows:*

1. Attendance is taken for all class meetings. Please **notify me in advance** if you will be absent or tardy.

2. *Assignments are due as stated. Late work at the graduate level will be considered unacceptable. The student may petition the instructor in writing for consideration of one extenuating circumstance.*

3. *More than one class absence may result in a reduced participation grade.*

C. Student Conduct: All students shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.

D. Dropping the Class/Withdrawing from the University: If you need to adjust your schedule by dropping this course, please follow university procedures to officially drop the class. If you fail to officially drop the class, a failing grade shall be assigned at the end of the course.

Academic Policy Statement 990407. If a student resigns (officially withdraws) between the 1<sup>st</sup> class day and the 12<sup>th</sup> class day (4<sup>th</sup> class day in the summer) no record of the resignation will appear on the student's academic record. If a student resigns after the 12<sup>th</sup> class day (4<sup>th</sup> class day in summer) but before mid-semester, a record of the resignation will appear on the student's academic record. If a student resigns after eight weeks in the fall or spring or after the first two weeks of a summer session the mark of WP (withdrew passing) or WF (withdrew failing) will be recorded on the student's academic record for each course for which the student was enrolled. To resign (officially withdraw) from the university, a student must either report to the Registrar's Office to complete a Resignation Request or submit a letter stating his or her intent to resign.

E. Students with Disabilities Policy: Please see <http://www.shsu.edu/syllabus/>

F. Student Absences on Religious Holy Days: Please see <http://www.shsu.edu/syllabus/>

G. University Policies: Graduate students are governed by the SHSU's policies related to student conduct. Any student with questions about grievances, ethical behavior, etc. should review the SHSU Graduate Catalog and the Texas State University System Rules and Regulations. See: [http://www.shsu.edu/~vaf\\_www/aps/stualpha.html](http://www.shsu.edu/~vaf_www/aps/stualpha.html)

H. The Sam Houston Writing Center provides writing and editing assistance. 936-294-3680

## V. Evaluation of Learning Objectives

A. Assessments will be combined and the instructor will assign the final grade based on the student's demonstrated performance, attitudes, and abilities related to the goals and objectives of the class (detailed in syllabus, section II).

Assessment #1 Basics Research Terms and Concepts (quizzes, on-line modules)

Assessment #2 Critical Analysis of Research (given a research report, evaluate components of report (text Task 11)

Assessment #3 Research Report Literature Review (given a topic, write an introduction (significance, brief review of literature, research questions; text Task 2)

Assessment #4 Sample Report (given a topic, describe the sample for the study; text Task 4)

Assessment #5 Methods Report (given a topic, write the methods section of a research report; text Task 6)

Assessment #6 Results Report (write the results section of a research report; text Task 7)

Assessment #7 Final Exam: Task 10 (report) and application problems

Assessment #8 Graduate student dispositions, class attendance, and participation

### B. Grading Scale

A = Exceeds Standards and demonstrates learning beyond the course and stated expectations. "A" work is earned by learners who extend learning beyond the minimum presented in class and demonstrate developed written and verbal communication skills.

B = Meets Standards and demonstrates mastery of objectives assessed. "B" work is earned by learners who demonstrate responsibility by meeting all deadlines, attending class, completing homework assignments, and earning passing grades on assessments.

C = Inconsistent performance that may be impacted by incomplete assignments, absences, or tardiness. "C" work is earned for submissions with several mechanical errors or issues related to quality and quantity standards.

F = Failure to meet Standards

Student Information Card

ASE 579

\_\_\_\_\_  
Last Name Preferred First Name Cell Phone

\_\_\_\_\_  
Preferred E-mail Alternate E-mail Home Phone

\_\_\_\_\_  
Workplace: District Name Campus Your Position

In the event of an emergency that would occur during class time, who should be contacted?

\_\_\_\_\_  
Name Number to reach contact during this class time

Something that I hope doesn't happen in this class is . . .

Something that I want you to know about me is . . .

### Assessments & Performance Tasks

- Assessment #1 Basics Research Terms and Concepts (quizzes, on-line modules)
- Assessment #2 Critical Analysis of Research (given a research report, evaluate components of report (text Task 11)
- Assessment #3 Research Report Literature Review (given a topic, write an introduction (significance, brief review of literature, research questions; text Task 2)
- Assessment #4 Sample Report (given a topic, describe the sample for the study; text Task 4)
- Assessment #5 Methods Report (given a topic, write the methods section of a research report; text Task 6)
- Assessment #6 Results Report (write the results section of a research report; text Task 7)
- Assessment #7 Final Exam: Task 10 (report) and application problems
- Assessment #8 Graduate student dispositions, class attendance, and participation

### VI. Class Schedule

I will use a combined approach of classroom time, field projects, and Web-based instruction to achieve the objectives of the course. The allotment of instructional time will exceed the minimum requirement of 45 hours for the 3-credit hour course.

Class Meeting Dates	Units & Topics	Assignments & Graded Tasks
1 Aug 20	Research, Inquiry, and Tools for Research	
2 Aug 27	Designs, Categories, & Components of Research Studies	Ch 1
3 Sept 10 (x)	Ethics (Read Ch 3) Complete Ethics course	Ch 3
4 Setp 17	Components of Research Plans Critique Research	Quiz Ch 3
5 Sept 24	Measuring & Instruments Descriptive Stats	Quiz Ch 5 Ch 11
6 Oct 1	Inferential Stats Drawing Conclusions	Quiz Ch 12 Ch 13
7 Oct 8	Evaluating a Report	Quiz Ch 22
8 Oct 15 (x)	Assessment #2 Critical Analysis of Research (given a research report, evaluate components of report (text Task 11)	
9 Oct 22	Topic Assignments, Finding Literature, Reviewing Literature, Organizing Literature	Task 11 Ch 2
10 Oct 29	Writing the Review (draft) Designing Questionnaires Draft Task 4 (sample)	Draft Task 2
11 Nov 5	Writing the Review (draft) Designing Questionnaires Organizing Existing Data (Excel, AEIS)	Draft Task 2 Draft Task 4
12 Nov 12	Designing Experiments Collecting info with Observations Describing Methods (Task 6)	Task 2 due (intro) Task 4 due (sample)
13 Nov 19 (x)	Collect and analyze data Work on Task 7	Draft Task 6 & 7
14	Current Issues	Task 6 due (methods)

Nov 26		Task 7 due (results)
15 Dec 3	Current Issues	Task 10 (report)
16 Dec 10 (x)	Final Exam	Application Problems

## VII. Topic Outline

### **Research, Inquiry, and Tools for Research**

Review syllabus and research project timeline.

What is Research? Tools of Research

Sources of Knowledge

Nature of Scientific Inquiry & the Scientific Method (steps)

Types of Educational Research (Classifications)

Tools of Research: Library, Computers, Measurement, Statistics, Thought, Language

Educational Research Report Formats

Use examples of research from book or journals. Focus on research reporting formats. Identify topic, type of study, procedures, method of data analysis and major conclusions.

Review APA Chapter 1. (Introduction, Methods, Results & Discussion)

Review organization and purpose of APA reference text.

### **Ethics & Safeguards**

Complete training and bring certificate from <http://www.cancer.gov/clinicaltrials/learning/page3>

[Human Participant Protections Education for Research Teams](#)

Explore SHSU process (Office of Research & Sponsored Programs/OSRP)

Discuss Administrator responsibilities related to research in schools: FERPA/Buckley Amendment, National Research Act of 74

Resources: Ch 3)

### **Research Study: Purpose, Questions, Significance**

Review components.

Writing research questions & hypotheses

### **Measuring, Instruments & Descriptive Statistics**

The nature of data in research

Variables

Scale of Measurement (NOIR)

Types of educational measures: tests, questionnaires, observations, interviews

Validity and Reliability of scores

Discuss research reported in the newspaper or news. Discuss "how good are the data?"

Review several research & measurement vocabulary terms that impact quality of data.

Quantitative Data Analysis

Normal curve & standard deviations

Graphs & frequency distributions

Measures of central tendency

Measures of variability

Measures of correlation

### **Inferential Statistics & Drawing Conclusions**

Statistical Significance

Hypothesis testing

Types/Uses of a few stats Tests of Statistical Significance: What & Why

The t test, ANOVA, Chi square

Variables (IV & DV), treatment and control groups

Drawing conclusions based on valid data

Using graphs and charts to display data



Presenting Findings  
Drawing Conclusions  
Providing Recommendations

### **Locating and Reviewing Literature**

Why Review Related Literature? Connecting theory to practice

Linking the study's significance to related literature

Finding sources using keywords

[http://tegrity.shsu.edu/tegrity/library/library\\_databases/class/default.htm](http://tegrity.shsu.edu/tegrity/library/library_databases/class/default.htm)

Utilizing the Internet

[http://library.shsu.edu/research/instruction/internet\\_tutorial/tut\\_home.html](http://library.shsu.edu/research/instruction/internet_tutorial/tut_home.html)

Utilizing the Library databases

[http://library.shsu.edu/research/instruction/infotutorial/tut\\_home.html](http://library.shsu.edu/research/instruction/infotutorial/tut_home.html)

Evaluating Primary Sources

Strategies to organize and write literature review

Use literature reviews from journals, such as Review of Educational Research vol 76, no 1, pp 1-62 "Does Homework Improve Academic Achievement?". Discuss how the topic was introduced. Outline the article. Discuss topic sentences.

Demonstrate outlining literature reviews: organizing by topics & references

Demonstrate writing one paragraph after synthesizing literature.

Review mechanics, such as in-text citations APA pp207-214

Discuss: How can writing help you be a good administrator/educator?

Resources: Gay Chapter 4, Internet

1. Use online databases to search for sources related to your topic. Acquire peer-reviewed journal articles more relevant to your topic. Create a list of references in APA format.

2. Read APA Chapter 4

### **Planning your Research Study: Purpose, Significance, Questions**

Introductions, significance

Literature

Writing research questions.

### **Selecting Participants and Sampling**

Sampling for Quantitative studies

Sampling for Qualitative studies

Use of Volunteers

Sampling Size

Sampling Bias and Sampling Error

### **Experimental Research Designs**

Identify purpose and research questions asked

Random sampling

Various experimental research designs

Data collection methods and analyses

Tests of Statistical Significance: What & Why

The t test, ANOVA, Chi square

Variables (IV & DV), treatment and control groups

Homework:

1. Research Project

### **Current Issues in Educational Research**

NCLB

Scientifically-based research

What Works Clearinghouse

Applications

Mixed Methods Designs

Action Research Designs

Action Research journals <http://www.scu.edu.au/schools/gcm/ar/ari/arihomet.html>

- <http://www.arexpeditions.montana.edu>
- <http://education.ucsc.edu/faculty/gwells/networks/>
- <http://www.nipissingu.ca/oar/>

**VIII. ASE 579 Scoring Guides for Graduate Level Assessments**

<b>Assessment</b>	<b>Exceeds Expectations A-level work (Quality &amp; Quantity)</b>	<b>Meets Expectations B-level work</b>	<b>Inconsistent Performance C or F-level work</b>
Critical Analysis	90% accuracy	80% accuracy	Below 70% accuracy
Review of Literature (Task 2)	The work is error-free. The text is clean and polished. Strong conventions increase readability. Precise language presents a clear message. The review demonstrates an advanced understanding and level of thought. Additional sources may add to overall quality of review.	The work is well-edited and contains fewer than 3 errors. The writer uses information from at least 6 peer-reviewed, recent (8 yrs), and relevant sources. APA style is used to cite references with few errors.	Activity less than meets expectations. The author has disjointed ideas. Errors are frequent and distracting. The reader must pause to understand text. The paper reads like a first draft. The writer struggles with limited vocabulary and words may be used incorrectly. Questionable or irrelevant sources (magazines, Internet, popular books are used).
Research Project (Task 10, 2, 4, 6, 7)	See criteria described in text		
Assignments, Quizzes, and other homework activities	Quizzes are completed with 88-100% accuracy most of the time. Written assignments are accurate and show evidence of advanced thought and attention to detail.	Quizzes are completed with 75-88% accuracy more times than not. Written assignments are completed with accuracy.	Inconsistent performance occurs on quizzes; more than one was missed due to absence or tardiness.
Graduate student dispositions & synthesis of content	Attends all classes. Prepares by completing all assignments and adds to work with evidence of independent study beyond normal assignments.	Attends all or almost all classes. Submits all work on time. Prepares by completing almost all weekly assignments.	Less than meets expectations