ASE 579 METHODS OF RESEARCH Summer 2008

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

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PLACE & TIME: Cypress Ridge High School – 7900 N. Eldridge Parkway,

Houston 77041 - Room 2711

REQUIRED TEXT(S):

Gay, L. R., Mills, G. E., & Airasian, P. (2006). *Educational Research: Competencies for Analysis and Applications* (8th ed.). Upper Saddle River, NJ: Prentice Hall. ISBN 0-13-118534-9.

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.) Washington, DC: American Psychological Association.

SPSS (Social Science Statistical Package) or STATPAK.

- STATPAK is free and you can access it by going purchasing the text and going to www.penhall.com/gay.
- SPSS can be obtained by: (a) downloading a 14-day trial from www.spss.com, (b) accessing through Sam Houston web page {Start>All Programs>Accessories>Communications>Remote Desktop Connection. Click Connect, SHSU log-in appears, log-in, SHSU desktop will appear on the computer screen. Any problems with this call, Computer Help Desk 936-294-1950, (c) or by purchasing through Barnes and Noble SHSU Bookstore, 936-294-1862. The entire package of Educational Research...(text, workbook, and SPSS student version) is \$146.00, text itself is \$107.00 and shipping is \$6.95.
- If you are looking to save money on the text, you may rent the text for the course by logging on to http://www.safarix.com.

COURSE DESCRIPTION:

This course is designed to guide graduate students in the College of Education through the process of conducting a research study.

COURSE OBJECTIVES:

- 1. Identify and define a researchable problem, review related literature, and state the problem.
- 2. Use technology for enhancing learning (Blackboard, e-mail, web-sites, Power Point, SPSS, STATPAK).
- 3. Write research questions (hypotheses) to guide research.
- 4. Apply sampling procedures to selected research.
- 5. Demonstrate knowledge of criteria for evaluation and selection of test instruments and apply this knowledge to a research problem.
- 6. Compare the following research designs (descriptive, experimental, correlational, and causal comparative) and apply one of the designs in conducting research for a research paper.
- 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. Evaluate research articles.
- 9. Use library resources for conducting research.
- 10. Learn a proper style for writing research material (APA style is required).
- 11. Use ethical procedures in conducting research.

FOR YOUR INFORMATION

- ✓ Please check Blackboard daily for instructions on web-site changes, web-site links, information, etc. You will need a student account, call 936-294-1950 if you have difficulty setting up account. Log on to Blackboard by accessing SHSU webpage and linking on to Blackboard. Your student account # will also permit you to use library resources.
- ✓ For better <u>communication</u>, it is suggested that you have "buddies" to gather information from classes you have missed. They should also collect handouts for you. Also make sure that everyone in your group has the same question. Sometimes persons in your group may be able to answer your question. If the question is not resolved after this, then contact Dr. Smith by e-mail or cell if urgent 281-795-6419.
- ✓ If you are a student with a <u>disability</u> that may affect your academic performance, please contact the professor as soon as possible or you may contact the Director of the Counseling Center as chair of the Committee for Continuing Assistance for Disabled Students at 294-1720.
- ✓ Academic <u>honesty</u> is expected in this class. Violations will result in course failure.
- ✓ <u>Attendance.</u> Since the summer course is so short is of utmost importance that you

attend every class meeting and only miss in case of emergencies.

- ✓ Late assignments will be penalized by one letter grade for each 24-hour-period they are not turned in.
- ✓ The syllabus is subject to change pending notification.

June 2

Objectives:

- 1. Use library for accessing research articles.
- 2. Use technology (Blackboard, SPSS, STATPAK, e-mail, Power Point, web-sites) for learning about methods of research.
- 3. Use American Psychology Association (APA) Publication Manual for formatting paper, citations, and references.
- 4. Select and define a research topic. Read chapter 1 & 2 in text. Go to website www.prenhall.com/gay, go to chapters 1 & 2, view Power Point that corresponds to chapters 1 & 2. You will define a research topic on which you will write your 10-page paper (excluding references and tables). The paper can be written in partners; you may reach them via e-mail and Discussion Board on Blackboard. Partners have been selected for you and the list is the following: TBA

Activities:

1. Log on to SHSU website, on main page click Newton Gresham Library (NGLibrary) Click - On-Line Instruction Series

Click - Information Literacy Tutorial

Go through the modules, take tests

Print certificate. Certificate will be attached to the final paper you turn in.

2. Click - Internet Tutorial

Go through all modules.

Take tests.

Print Certificate. Attach to final paper you turn in.

3. Brainstorm with your partner about a topic for your paper. Use what you have learned in library to access two journal articles. For each article write one page with the following information: (a) topic studied, (b) procedures, (c) method of analysis, and (d) major conclusions. A detailed explanation for this assignment is located on the top of page 20 in your text. Submit this assignment through Dropbox in Blackboard. Start a Reference page for your paper and reference the articles in APA style. The format for the final paper is on page 21-24 of your text. Start using this format as your framework, we will add to this framework every class period until we have discussed all parts of the paper.

June 4

Objectives:

- 1. Use ethical procedures in conducting research.
- 2. State the major characteristics of major quantitative research designs (correlational, descriptive, causal-comparative, experimental).

Activities:

- 1. Read Chapter 3 and log on to website and view Power Point on this chapter.
- 2. Download the following two forms from Blackboard Course Documents: (a) Research Form and (b) Consent Form. Print the forms and fill in as much as possible. We will discuss these forms in class so bring them with you. You will complete some parts of the forms each time we meet and then turn them in with your final paper.
- 3. Review the Power Point presentation for chapter 1 on the characteristics of major quantitative research designs and make a comparison chart of the designs. If I meet with you face to face we will do this in class and you can work with your partner. If I cannot meet then you will work on the chart with your partner via Blackboard. For information on points on which they are different examine the points made at the end of chapters 6 (Descriptive Research), Chapter 7 (Correlational Research), Chapter 8 (Causal Comparative Research), Chapter 9 (Experimental Research).

June 9

Objectives:

- 1. Develop a strategy for analysis of literature reviewed.
- 2. Write research questions that correspond to research designs studied.

Activities:

- 1. Read chapter 2 pages 56-69.
- 2. Write 2 null hypotheses for each type of design.
- 3. Write 2 alternative hypotheses for each type of design.
- 4. Write 2 research questions for each type of design.
- 5. Write 3 research questions for your research study.
- 6. Identify the independent variables and dependent variables in each research question.
- 7. Use the article on page 21 24 in text and analyze how the literature review was conducted.
- 8. Bring literature reviewed (journal articles) with you to class and analyze it for including in your research paper. You will need a least six references for the paper and you need to apply APA style to paper. Analysis means grouping the literature into those that favor a point you are trying to make or that disagree with a point you are trying to make, then making a summary statement about what you have found in your literature.

June 11

Objectives:

- 1. Use different resources for gathering data.
- 2. Use instruments that are valid and reliable.

Activities:

- 1. Read Ch. 5 in text.
- 2. View Power Point slides on website.
- 3. Observe the steps in developing the *Stress and Coping Bullying Measure (Robles-Piña, 2004)*.
- 4. Develop a survey and discuss the steps in assuring it is valid and reliable.

June 16

Objectives:

- 1. Use the appropriate sampling procedures for the type of design.
- 2. Provide step-by-step procedures for collection of data.

Activities:

- 1. Read Ch. 4 in text.
- 2. View Power Point slides for chapter 4 on website.
- 3. Apply sample size to your research study and discuss in large group.
- 4. Fill in the sample information in the Research Form.
- 5. Fill in the procedures for conducting research on Research Form.

June 18

Objectives:

- 1. Use data to explain research results.
- 2. Use SPSS or STATPAK to analyze small data sets.
- 3. Prepare a table explaining results using APA-style.

Activities:

- 1. Use small data set given in class to analyze independent samples t-test, paired-samples t-test, correlation, Chi-square, ANOVA.
- 2. Make up a data set to use for your research paper.
- 3. Develop a table explaining your results.

June 23 and 25

 A 10-page paper to include: (a) quantitative research, (b) APA-style, (c) a minimum of 6 references and citations, (d) emphasis of one particular design (survey, correlational, experimental, causal-comparative, (e) 3 research questions (hypotheses) and, (f) one table with data analyzed. See page 21-24 of text for model for paper. Since you do not have time to collect data, you will make up small data sets. You will work with an assigned partner on this. You may contact that partner via e-mail and work together using Blackboard. (150 points).

- The 2 certificates for library work will be attached to paper.
 The Research Form and Consent Form will be attached to paper.
 The typed paper will be handed in with a small clip (please no folders or binders).
- Make a 15- minute oral power presentation summarizing your paper. Rubric will be provided for you on this assignment. This assignment can also be done with a partner. (50 points)

Summary of Assignments and Points:

_2 Certificates from Library (with your name printed on the forms); turn in with final
paper. (25 pts.)
_2 journal articles; turn in June 4. (25 pts.)
_1 chart comparing all designs discussed (descriptive, correlational, experimental,
causal-comparative); you may use bullets for comparisons; due June 11 . (25 pts.)
Research Forms (research plan); turn in with final paper. (25 pts.)
_Final paper; due June 30 . (150 pts.)
_15-minute power point presentation of paper; summarize by using major headings of
paper. (50 pts.)
_Total 300 points

Evaluation:

A = 300-270 pts.

B = 269-240 pts.

C = 239-210 pts.

ENJOY THE REST OF YOUR SUMMER!!!