Dr. Kathy Norman   311 University Hall   knorman@ csusm.edu
Office Hours: Thurs. 3:45-4:45, and by apt.   (760) 750-4314

Required   <u>How to Design and Evaluate Research in Education, 5th Edition</u>
Textbooks: by J.R. Fraenkel and N.E. Wallen, McGraw Hill

Fundamentals of Descriptive Statistics
By Z.C. Holcomb, Pyrczak Publishing

<u>Publication Manual of the American Psychological Association</u>.
Washington, D. C.: American Psychological Association.

<u>The Elements of Style</u>.
by W. Strunk and E.B. White, New York: MacMillan

Course Description

This course is designed to introduce educational practitioners to the fields of educational research and evaluation. It explores quantitative and qualitative methods of designing and conducting research and evaluation in the context of classroom settings. It further examines measurement, assessment, common statistical techniques and methods for critiquing research and program evaluation studies.

Course Objectives

Students will increase their:
- ability to critique education research
- understanding of various research methodologies
- knowledge of education research
- skills in planning research; and
- ability to summarize and interpret research.

College of Education Mission Statement

The mission of the College of Education Community is to collaboratively transform public education by preparing thoughtful educators and advancing professional practices. We are committed to diversity, educational equity, and social justice, exemplified through reflective teaching, life-long learning, innovative research, and on-going service. Our practices demonstrate a commitment to student-centered education, diversity, collaboration, professionalism and shared governance.

(adopted by COE Governance Community, October 1997)

COE Attendance Policy

Due to the dynamic and interactive nature of course in the COE, all students are expected to attend all classes and participate actively. At a minimum, students must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor.

In this course, five classes are held on WebCT. It is important to "attend" the WebCT classes and do the assignments as directed. It is also very important not to miss the "on-ground" classes. If two on-ground class sessions are missed, a student cannot receive a grade of "A". If three class sessions are missed, the highest possible grade that can be earned is a "C". Late arrivals and early departures each count as ½ absence. If extenuating circumstances occur, the student should contact the instructor as soon as possible to make appropriate arrangements. Late assignments are

Students with Disabilities Requiring Reasonable Accommodations.

Students are approved for services through the Disabled Student Services Office (DSS). This office is located in Craven Hall 5205, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

Writing

In keeping with the All-University Writing Requirement, all courses must have a writing component of at least 2,500 words (approximately 10 pages) which can be administered in a variety of ways.

E-mail

You must go to ACD 202 to activate your CSUSM e-mail account.

Assignments

1. WEEKLY COMPREHENSION QUESTIONS   13 pts.

Prior to the beginning of each class session, you should submit a total of three questions based on the week's reading, to the instructor by email on the class Web CT site. Bring copies to class for your own use during our discussion. One of the questions should be a "challenge" question for which you do not have an answer. For the other two questions, write questions and their answers to capture what you see as the major/interesting/provocative points of the readings. (1 pt. for each reading assignment)

2. WEEKLY CLASS WEB CT DISCUSSIONS   14 pts.

This course has a Web CT site. You should visit the site (go to courses.csusm.edu and log in) each week, and take part in the weekly discussion on the discussion board. Read the instructions and type your entry. Read entries from other students, and respond to at least two entries. You should post your entry no later than Sunday of each week so that other students have time to respond to your entry prior to Thursday. Be sure to respond to two other students' entries prior to class on Thursday. You may also post questions you have or other ideas, concerns, etc. to the discussion board. (1 pt. Each)

3. WEB CT ASSIGNMENT: OBSERVATION   10 pts.

4. WEB CT ASSIGNMENT: INTERVIEWING   10 pts.

OBSERVATION AND INTERVIEW ASSIGNMENT RUBRIC

Category	Distinguished 2 pts.	Acceptable 1 pt.	Unacceptable O pt.	Your Score
Organization				
Completeness				
Content				
Relevance				
Cogency				

Total Score _____

5. JOURNAL CRITIQUE   **10 pts.**

Select one journal article reporting on a research study in your area of interest. Write 2-3 page critique of it. The article should be from a professional journal in education. Create a visual representations of the methodology section and display each in class. Include a discussion of the following.

- Is the title appropriate for the study? Why or why not?
- Was the introduction written in clear language avoiding non-technical language and jargon?
- What is the problem being investigated? Is it clearly stated in the article?
- Why should this problem be researched?
- Is the problem sufficiently limited in scope?
- Does the problem fit into the broader context of current theory and relevant research?
- Does the problem statement make assumptions or unsupported claims or statements?
- How significant is the problem and in what context?
- What is the significance of this problem?
- Does the problem explore an important question, meet a recognized need, or make a useful contribution to a relevant body of knowledge?
- Is the research question clearly and directly stated, and is it related to the hypothesis or hypotheses in the study?
- What is the research question?
- Are operational definitions given? If so, give an example.
- Is the relationship or differences among/between the variables clearly stated?
- What was the background to the study?
- Did the author(s) present a review of literature? Was it relevant? What were the major points from it?
- Describe the methodology in detail.
- Was a sample used in the study? If so, how was it selected?
- How was the data collected and analyzed? Were these methods appropriate?
- Were the results clearly presented?
- What were the major findings of the study and what were they based on?
- What was the conclusion?
- Do the results or findings support the conclusion? Why or why not?
- Are any limitations of the study noted? If so, what were they?
- Are there any internal and/or external threats to the generalizability and or validity of the results? If so, what were they?
- How do the results of this study apply to your research area of interest?

JOURNAL CRITIQUE ASSIGNMENT RUBRIC

Category	Distinguished 2 pts.	Acceptable 1 pt.	Unacceptable O pt.	Your Score
Organization				
Completeness				
Content				
Relevance				
Cogency				

Total Score _____

6. RESEARCH EXAMPLE PRESENTATION   **10 pts.**

Each class member will sign up for one research study example to present to class using visuals and handouts. They will be assigned in class. Students presenting for a WebCT class session should post the powerpoint presentation and handout to the WebCT no later than the day before the scheduled class.

The presentation should include:
- A critical discussion of all aspects of the example study, particularly those details about the methodology that cause the study to be called a specific type of study. (Refer to specifics above on other details to include.)
- Another example of the same type of study, but in your own area of research –one that you have thought of (topic, research problem, sample, procedures, etc.)
- A handout for all students (may be emailed or posted to discussion board in WebCT).

RESEARCH EXAMPLE PRESENTATION RUBRIC

Category	Distinguished 2 pts.	Acceptable 1 pt.	Unacceptable O pt.	Your Score
Organization				
Completeness				
Content				
Relevance				
Cogency				

Total Score _____

7. RESEARCH PROPOSAL AND PRESENTATION   30 pts.

Chapter 1	4 pts.
Chapter 2	8 pts.
Chapter 3	4pts.
References in latest APA format	4 pts.
Appendices (instrument, budget, timeline)	4 pts.
Powerpoint Presentation	6 pts.

The research proposal includes three chapters: introduction, review of literature, and methodology. It will also include references and appendices. You will give a 12-15 minute presentation of your proposal to the class at the end of the semester. Each chapter should be peer reviewed by two classmates.

Each chapter and section will be examined for organization, completeness, content relevance, cogency;

RESEARCH PROPOSAL RUBRIC

Category	Chapter 1 Max 4 pts	Chapter 2 Max 8 pts	Chapter 3 Max 4 pts	References Max 4 pts	Appendices Max 4 pts	Presentation Max 6 pts
Organization						
Completeness						
Content						
Relevance						
Cogency						

Total Score _____

8. FINAL ASSIGNMENT   3 pts.
Write a reflective summary of your perceived personal growth in research class. This summary should be no more than 2 pages.

FINAL ASSIGNMENT RUBRIC

Category	Distinguished 1 pt.	Acceptable 1/2 pt.	Unacceptable O pt.	Your Score
Organization				
Content				
Cogency				

Total Score _____

EXPLANATION OF RUBRIC FOR WRITTEN ASSIGNMENTS

Category	Distinguished	Acceptable	Unacceptable	Your Score
Organization				
Completeness				
Content				
Relevance				
Cogency				

Categories for Evaluation Explanation
1. Organization. Evidence of a logical and meaningful consistency in the structure of the response to the structure of the assignment, evidence of planned presentation having a clear flow from the beginning, through the middle, to the conclusion.
2. Completeness. Evidence of having covered all parts of the assignment in the response.
3. Content. Evidence of having developed the response from significant concepts and insights gained from the readings, drawing upon relevant theories, literature, and citing sources in APA form and style as appropriate.
4. Relevance. Maintenance of pointed and clear relationships in response to the assignment, avoidance of digression from the main points of assignment, avoidance of boilerplate or filler material, and avoidance of redundant matter and educational jargon.
5. Cogency. Depth and breadth of insight, reasoning, and understanding exhibited in response through the integration of thought and argument.

Levels of Performance Explanation
1. Distinguished
    a. Few errors—proper grammar, spelling, and punctuation.
    b. Clear focus and use of appropriate/consistent tense and tone.
    c. Depth and complexity of ideas—details, reflection, analysis, and thought.
    d. Use of references indicates substantial research.
    e. Use of a variety of sentence length and structure (follows APA form and style).
2. Acceptable
    a. Some errors in grammar, spelling, and punctuation
    b. Grammatical errors do not interfere with communication.
    c. Focused on a purpose—suitable tone and use of historic present.
    d. Depth of ideas supported by relevant details.
    e. Use of references indicates ample research.
    f. Logical organization.
    g. Varied sentence structure—acceptable and effective language.
3. Unacceptable
    a. Attempt to establish and maintain purpose and communicate with the audience.
    b. Unelaborated idea development and repetitious details.
    c. Unelaborated details.
    d. Use of few references.
    d. Use of non-current literature.
    e. Errors in grammar, spelling, and punctuation
    f. Lapses in focus and coherence.
    g. Use of simplistic and awkward sentences.
    h. Use of imprecise and simplistic language.

Course Grading Criteria

1. Distinguished Category (Grade of A). Reserved for exceptional students. The student is superior in all areas of writing, presentations, and participation. Required research and assignments are superior in both content and writing with outstanding observations and explanations; use of complex, strong vocabulary, appropriate use of APA form and style. Student demonstrates scholarly demeanor, and interest in learning beyond the standard expectation. All papers are turned in on time and the student is actively present during entire class sessions.

2. Commendable Category (Grade of B). Very good in all areas producing the expected reports, writings, and presentations as per the standards established by Argosy University's School of Education. The majority of the assignments are turned in on time.

3. Acceptable or Average Category (Grade of C). Performance is acceptable and meets the minimum requirements.

4. Unacceptable (Grade of F). Absences, late arrival and early departure from class, lack of active participation, student does not demonstrate adequate knowledge of the subject matter. Assignments are not turned in on time.

Research Proposal

Title Page

Table of Contents

Chapter I - Introduction to Study
    Background
    Statement of the Problem
    Purpose of the Study and Rationale
    Research Questions and Hypotheses)
    Significance of Study and Applications
    Limitations
    Definitions of Terms

Chapter II - Review of Literature
    Introduction
    Subtopic Sections (at least 3)
    Summary of Literature Review

Chapter III - Methodology
    Population and Sample
    Procedures
    Instrumentation
    Data Analysis
    Assumptions

References

Appendices
    A   Time Schedule
    B   Budget
    C   Instruments
    D   others-optional

<u>**Proposal Guidelines**</u>

Overall Guidelines for Chapters:
- Break up the text as much as possible: use subheadings
- Edit for awkward sentence construction - especially if you have tried to paraphrase someone else's words in order to avoid quoting.
- Try to paraphrase long quotes. If you must keep a long quote, see the APA manual for block quote formating .
- Each chapter must have an introduction
- Each chapter should end with a summary or conclusion restating the main idea of the chapter
- Proofread, proofread, proofread…

Helpful Page Numbers for APA Formatting

	4th Edition:	5th Edition
Title page	p. 248, 258	p. 10, 306
Levels of headings	p. 91, 259	p. 113, 307-8
Page numbers & headers	p. 241	p. 12, 288
Writing numbers	p. 99	p. 122
Citations in text	p. 169-174	p. 207-214
Reference Page	p. 174-222, 251, 265	p. 215-281, 313
Block Quotes	p. 95, 245	p. 121, 117-119

Chapter One: Introduction: "Defining the Research/Project focus" Explain what you hope to accomplish in your thesis or project. What issue is to be addressed and explored? Be very clear about your research question or curriculum project. Definitions of terms must be very clear in this section. Do not assume that the reader knows what you mean when you use educational jargon. Everyone might not agree with your definitions, so you can define them and call them operational definitions.

Thoughts for Chapter One:
- Are terms and definitions clear?
- Is it clear what the focus of the research will be? One of two formats should be used: 1) The research shows X, Y, and Z, but it doesn't show_____. -or- 2) This research will help build upon the research of X, Y, and Z by _____.
- Is the question *very* clear? Do you understand exactly what the author hopes to find?
- Is the chapter written in present tense? (With the exception of citations of other research; use past tense or present perfect tense for these--see APA)

Chapter Two: Review of the Literature: "Putting the research project into context". Review what is currently known (and not known) about the issue to be explored. Where is the field in terms of what is happening with your topic? Try to put your project/issue in a theoretical context. On what theories/principles are you basing your project? What are your assumptions? What has informed your own thinking about this project? The review of the literature puts the project into perspective and lets the reader know why the project is of significance. ***You must have at least 5 referred journal articles for this pilot proposal.***

Thoughts for Chapter Two:
1. Are there too many or too few quotes. It's okay to paraphrase and then cite an author (many times this is preferable). But every other line or so shouldn't be a quote.
2. How well does the whole chapter hold together? Does it all seem necessary? Could any part(s) be cut out? Is all the research discussed relevant to the question presented in Chapter One?
3. Is it clear? Does it all make sense? What needs clarification?
4. Is the theoretical orientation of the writer clear? Depending on your project, you may need to go back to learning theory, psycholinguistic theory or miscue theory, something like that, which doesn't seem directly related to your project, but which is a major assumption on your part. Don't let your reader assume anything

- tell us what your assumptions are. (If Jeanne Chall were reading your project about strategies for second language learners, could she assume you have a part-to-whole, direct instruction of phonics orientation, or have you made it clear what your orientation to learning to read is?) Of what scholarly community are you a part?
5. Is there a clear and easy-to-follow organization? Your questions may help you develop the "chunks" of research or theory you're using for your project that can be organized using subheadings. For example; all the literature on thematic curriculum, then the literature on accessing the curriculum, then the literature on using literature as the basis for learning the curriculum. Put together the theorists and researchers that write about similar topics.
6. You are going to need to show one of two things: 1) that your project fills a gap in the current research. So show the need for your project: "The research shows X, Y Z, but it doesn't show_____." (Fill in the gap with your project); 2) that your project helps to substantiate current research; it helps to build the body of research; its one piece of a large puzzle, like about the impact of whole language classrooms on students' reading comprehension.
7. As much as possible find the original sources and cite them (rather than using secondary sources). If you do use secondary sources, be sure to check APA for proper formatting.
8. Are large pieces of text broken up? Are there appropriate subheadings?
9. Is there a summary/and or concluding paragraph? This should be a transition to what's coming next as well.
10. Are all necessary terms defined? You may have to define terms your sources did not.
11. After you have analyzed your data or completed your project, don't be afraid to go back and add literature that supports findings you didn't expect.

Some common mistakes:
- Anything that is quoted needs a page number
- Quotes longer than 5 lines should be in block format
- Research says (Goodman, Smith, Burke, etc.) reading is... – be sure to check APA on the use of et. al.
- Whenever possible - put the author not the title of the book or article. Do not include first names of authors.

Chapter Three: Methodology "Research/Project Designs and data collection" How will the research/project be conducted? What must be done in order for you to accomplish your goals? How will you collect data and how will you analyze it? In the introduction to this section, you must cite research that supports using this methodology that you feel is appropriate and give a clear rationale. The remainder of this section may simply be a description of what you did.

Example subheadings for Chapter Three if you are doing a research project:
- Design – Explain which type of methodology you used and why
- Setting – Give demographics of school district and setting, do NOT name schools or districts, you may give them a pseudonym.
- Subjects – Give details about how the subjects were chosen, who they are.
- Materials – Cite any tests or books you will be using, explain why they were selected.
- Procedure – This should almost be a cookbook type description, write it so that a peer could replicate what you have done. Also explain why the procedures were designed.
- Analysis – Explain how you will analyze all data you collect, give a rationale for why you selected these methods.
- Limitations – Reveal the limitations of the study.

Thoughts for Chapter Three:
1. This is the "how to" of your project.
2. How well does the whole chapter hold together? Does it all seem necessary? Could any part(s) be cut out?
3. Are descriptions of the methodology specific enough that someone could replicate? Is it clear? Does it all make sense? What needs clarification?
4. Is it focused? It should not be too big or too narrow.
5. Is there a clear and easy-to-follow organization?

6. Are large pieces of text broken up? Are there appropriate subheadings?
7. Is it clear how data was collected or your plan for putting your project together?
8. Be as specific as possible when describing what you did. Can the reader get a picture of what is happening. You may need to start by providing a context: "This took place in a second grade classroom in a small urban school. The students are diverse..."
9. Are you clear on what data is relevant?
10. If you are collecting data, you should clearly show that you have at least three sources of data. For example, if your research involves literature circles, do you have three ways to measure its effect?
11. Is it clear how data will be analyzed? How will you come up with your categories? Are you able to support the assumptions you made?
12. If you are describing a project or collecting data you may want to include some kind of graphic of your timeline as an overview and then in the narrative describe what happened, when.
13. Is there a summary/and or concluding paragraph? This should be a transition to what's coming next as well.

General Guidelines for Peer Review:
- APA format should be followed. Read APA for important information on such things as spacing, margins, etc.
- Give the author specific feedback on what you understood and what you didn't understand
- Think about how well the chapter holds together. Does it all seem relevant/necessary? Could any parts be cut?
- Is it clear? Does it all make sense? What needs clarification?
- Is there a clear and easy to follow organization? Are large pieces of text broken up? Are there appropriate subheadings?
- Is the theoretical orientation of the writer clear?
- Is there a summary and/or a concluding paragraph? This should be a transition to what will follow.
- Are all necessary terms defined? (Assume someone familiar with education will be the reader, but do not assume that they will understand all professional jargon).
- Did the author use spell check?
- Did the author cite properly? Are all citations in the reference page? Anything that is quoted needs a page number. Quotes longer than five lines are set apart by single spacing and indenting both margins.
- Are there too many or two few quotes? Many times it is preferable to paraphrase and then cite an author.
- As much as possible, did the author find the original source and cite them (rather than citing what someone else cited). However, if the author used a secondary source, did he or she follow the guidelines?
- Did the author use proper tense? APA suggests different tenses for different chapters. The main thing to remember is to be consistent within chapters.

EDUCATIONAL RESEARCH GRADESHEET

Name _____

Attendance: present, late or absent (please note and sign)	Questions	Discussions
	Submitted prior to class	

		Questions	Discussions
1/22	_____		
1/29	_____	_____	_____
2/5	_____	_____	_____
2/12	WebCT Class	_____	_____
2/19	_____	_____	_____
2/26	_____	_____	_____
3/4	_____	_____	_____
3/11	WebCT Class	_____	_____
3/18	_____	_____	_____
3/25	WebCT Class	_____	_____
4/1	Spring Break		
4/8	_____	_____	_____
4/15	WebCT Class	_____	_____
4/22	WebCT Class	_____	_____
4/29	_____	_____	_____
5/6	_____		_____
5/13	_____		

Assignments	Possible Points	Your Grade
1. WEEKLY COMPREHENSION QUESTIONS	13 pts.	
2. WEEKLY CLASS WEB CT DISCUSSIONS	14 pts.	
3. WEB CT ASSIGNMENT: OBSERVATION	10 pts.	
4. WEB CT ASSIGNMENT: INTERVIEWING	10 pts.	
5. JOURNAL CRITIQUE	10 pts.	
6. RESEARCH EXAMPLE PRESENTATION	10 pts.	
7. RESEARCH PROPOSAL AND PRESENTATION	30 pts.	
8. FINAL ASSIGNMENT	3 pts.	

Educational Research Class Schedule
EDUC 622/CRN 21528, R 5:30-8:15, UH439

<u>Class</u>
1-Jan. 22

Introduction to Class
Research Questions and Problems
Variables and Hypotheses
IRB Introduction
For next class: Read Chapters 1- 3; develop questions; Bring school IRB forms

2-Jan. 29

Bring school IRB forms
What is a good research question?
Ethics of Research
Literature Reviews
Human Subjects Protection & Institutional Review Board
For next class: Read Chapters 4-6; develop questions

3-Feb. 5

Sampling
Selecting a Topic for a "Practice" Research Proposal
Online and Library Resources Gabriela Sonntag
In Library: Obtain articles; Check out Theses
For next class: Read Chapters 7, 8 and 19; develop questions

4-Feb. 12– <u>WebCT Class</u>

Continue discussing research topics and questions, collecting articles
Instrumentation
Validity and Reliability
Observation and Interviewing
Do Observation Assignment
For next class: Read Chapters 9 and 13; develop questions

5-Feb. 19

Turn in Observation Assignment
Internal Validity
Experimental Research
Team Presentation 1: Experimental Research Examples
Continue discussing research topics and questions, collecting articles
Library Time—Do Literature Searches, Collect/Order Articles, and Check out Theses
For next class: Read Chapter 10 and 14; develop questions
For next class: Read Holcomb Ch. 1-4, no questions

6-Feb. 26

Descriptive Statistics
Single Subject Research
Team Presentation 2: Single Subject Research Examples
For next class: Read Chapter 11 and 15; develop questions
For next class: Read Holcomb Ch. 5-8, no questions

7-Mar. 4

Bring Chapter 1 of Pilot Proposal
Descriptive Statistics
Correlational Research
Team Presentation 3: Correlational Research Examples
Edit Chapter 1

For next class: Read Chapter 12 and 16; develop questions
For next class: Read Holcomb Ch. 9-11, no questions

8-Mar. 11- <u>WebCT Class</u>
      Inferential Statistics
      Causal-Comparative Research
      Team Presentation 4: Causal-Comparative Research Examples
      Do Interview Assignment
      For next class: Read Chapter 17; develop questions

9-Mar. 18
      Turn in Interview Assignment
      Turn in Journal Critiques
      Article Critique Presentations and Visual Representations of **Research Methodologies**
      For next class: Read Chapter 18; develop questions

10-Mar. 25 – <u>WebCT Class</u>
      Survey Research
      Team Presentation 5: Survey Research Examples
      Qualitative Research
      Team Presentation 6: Qualitative Research Example
      NBPTS – National Board for Professional Teaching Standards
      For next class: Read Chapter 20; develop questions

(Apr. 1 Spring Break)

11-Apr. 8
      Bring Chapter 2 and References
      Content Analysis
      Team Presentation 7: Content Analysis Research Examples
      Edit Chapter 2
      For next class: Read Chapter 21; develop questions

12-Apr. 15 - <u>WebCT Class</u>
      Ethnographic Research
      Team Presentation 8: Ethnographic Research Examples
      Grant Proposals
      For next class: Read Chapter 22 and 24; develop questions

13-Apr. 22 - <u>WebCT Class</u>
      Historical Research
      Team Presentation 9: Historical Research Examples
      Preparing Research Proposals and Reports
      For next class: Read Chapter 23; develop questions

14-Apr. 29
      Bring Chapter 3 and Appendices
      Action Research
      Team Presentation 10: Action Research Examples
      Edit Chapter 3

15-May 6
      Turn in Research Proposal (Chapters 1-3, References, Appendices)
      **Research Presentations

16-May 13 Finals Week
      **Presentations