

Seattle University ■ 901 12th Avenue, PO Box 222000, Seattle, WA 98122-1090 ■ (206) 296-6000
College of Education ■ Loyola Hall ■ (206) 296- 5760

EDUC 500 – Introduction to Educational Research and Graduate Study – Spring 2008
Wednesdays 5:45-8:25pm – Loyola 302

Seattle University Mission

Seattle University is dedicated to educating the whole person, to professional formation,
and to empowering leaders for a just and humane world.

College of Education Conceptual Framework

The College of Education is dedicated to preparing ethical and reflective professionals for quality service in diverse communities.

My Education Mission:

My mission is to create safe, caring, and inclusive environments that enable all people to excel as
productive ***thinkers*** and effective ***team members*** driven by ***purpose***, ***hope***, and ***desire***.

Course Information

EDUC 500 – Introduction to Educational
Research and Graduate Study
Spring 08
3 credits
Loyola 302
Wednesdays 5:45-8:25pm

Instructor

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Office Hours

Mondays and Wednesdays

Please schedule and confirm an appointment.

Course Graduate Bulletin Description

EDUC 500 – Introduction to Educational Research – 3 credits	Introduction to research skills and literature in students' fields. Includes an orientation to graduate studies. Ordinarily taken early in one's graduate program of study.
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Course Purpose

The *overall purpose* of this course is to enable you to develop and apply basic knowledge, skills, and dispositions that underpin effective social science research. Course procedures are designed to engage you and all participants in building a supportive and collaborative learning community for inquiry, exploration, and decision making.

Course Goals/Outcomes/Competencies

1. Know and understand various types of research (emphasis on quantitative research with an introduction to qualitative research; descriptive/nonexperimental and causal/experimental designs).
2. Think critically about ethical issues in research (especially IRB issues relevant to protecting the rights and welfare of human subjects).
3. Use library and Internet data-base systems to locate scholarly literature (primary, secondary, and general expert-opinion references).
4. Review and critique research references/reports.
5. Make research-based professional decisions as a critical consumer (identify strengths and limitations of research designs/results/conclusions).
6. Analyze/Design methodologically sound research (identify strengths and limitations).
7. Work collaboratively to enhance critical thinking and interpersonal communication for effective decision making in research.
8. Use APA (current edition) style in scholarly writing.
9. Develop awareness of software packages for data analysis (e.g., SPSS, Nudist, N*Vivo, etc.).

Overview of Major Aims

<p>1. Construct a <u>Literature Review</u></p> <ul style="list-style-type: none"> ■ Requirements #1, #2, #3, #4 ■ APA Manual (5th ed.) 	<p>2. Demonstrate <u>Understanding and Application of Key Research Concepts</u></p> <ul style="list-style-type: none"> ■ Requirements #5, #6 ■ Textbook and Handouts 	<p>3. <u>Collaborate</u> for High-Quality Thinking and Decision Making</p> <ul style="list-style-type: none"> ■ Research Support Team ■ Class Activities
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Overview of Research Steps and Key Concepts

Basic Steps	Key Concepts
1. Question	Research Questions (descriptive, correlational, comparative, causal).
2. Design	Methods (quantitative, qualitative, mixed). Quantitative Nonexperimental (<i>designs</i> : survey, correlational, comparative, causal-comparative). Quantitative Experimental (<i>designs</i> : single-group, nonequivalent-group/quasi-experimental, experimental, factorial, single-subject; <i>validity</i> : internal, external). Qualitative (<i>designs</i> : ethnographic, phenomenological, grounded theory, case studies).
3. Sample	Probability Samples (especially simple random, stratified random, systematic, cluster). Nonprobability Samples (especially purposive, snowball, convenience, volunteer, typical case, extreme case). Sampling (selection, size, representative, assignment to conditions).
4. Data Collection	Measures (<i>types</i> : interviews / focus groups, questionnaires/surveys, observations, tests, documents/archives; <i>issues</i> : validity, reliability). Scales (nominal, ordinal, interval, ratio).
5. Data Analysis	Descriptive Statistics (<i>frequency</i> : normal curve, standard deviation units; <i>central tendency</i> : mean, median, mode; <i>variability</i> : range, standard deviation; <i>correlation</i> : Pearson r ; <i>practical significance</i> : effect size). Inferential Statistics (t test, simple ANOVA such as 1x3 design, factorial ANOVA such as 2x2 design, Chi-square). Qualitative Analysis (<i>data</i> : emic, etic; <i>analyses</i> : interpretational, structural, reflective; <i>credibility</i> : triangulation).
6. Interpretation	Confidence in Conclusions (strengths/limitations). Generalization of Results (implications/applications).
7. Report	Primary Sources (original studies). Secondary Sources (narrative reviews, meta-analysis reviews). General Sources (expert-opinion articles).

RESEARCH REPORTS

Secondary Sources	
Review (synthesizes/summarizes a collection of primary sources)	Purpose
Narrative (summarizes patterns of findings across quantitative and/or qualitative studies)	Synthesizes/Summarizes a collection of quantitative, qualitative, and/or mixed-method studies on a specified topic; uses narrative to report key findings classified into broad categories or themes.
Meta-Analysis (statistically calculates <i>effect size</i> across quantitative studies)	Synthesizes/Summarizes a collection of quantitative studies that examined the same problem; uses <i>effect size</i> to report statistical findings on magnitude of change across groups/conditions.

Primary Sources		
Research Study/Design	Quantitative (phenomena measured and statistically analyzed/reported)	Qualitative (thick description of phenomena summarized/reported as themes)
Noncausal (researchers do not manipulate treatments)	<ul style="list-style-type: none"> ■ Descriptive Studies <ul style="list-style-type: none"> • Survey • Other . . . ■ Correlational Studies <ul style="list-style-type: none"> • Bivariate • Multivariate • Other . . . ■ Comparative Studies <ul style="list-style-type: none"> • Causal-Comparative • Other . . . 	<ul style="list-style-type: none"> ■ Case Study ■ Phenomenological Study ■ Ethnographic Study ■ Grounded Theory Study ■ Other . . .
Causal (researchers manipulate treatments) * <u>Note</u> : True experiments randomly assign participants to different groups/conditions to promote equivalence at the onset among groups/conditions.	<ul style="list-style-type: none"> ■ Causal Studies <ul style="list-style-type: none"> • Single-Group Designs • Nonequivalent-Group Designs • Quasi-Experimental Designs • Experimental Designs* • Single-Subject Designs • Other . . . 	Nonapplicable

Required References

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

McMillan, J. H. (2008). *Educational research: Fundamentals for the consumer* (5th ed.). Boston: Pearson Education Allyn and Bacon.

Required Relevant Reading

Note: References of your choice relevant to your research topic of interest (e.g., journal articles, book chapters, evaluation reports).

Bring To Class Each Week

Course Syllabus	Course Handouts Organize in a notebook.
Course Textbook	Your <u>Research Inquiry</u> Materials Organize in a notebook.
Chapter Outlines Available at www.ablongman.com/mcmillan5e	APA Manual (5th ed.)

Laurie’s Top 10 Tips for Getting the Most out of this Course: What Would You Add?!

1. Graduate school is a life-changing experience that requires reorganizing priorities to succeed and excel. Focus! Focus! Focus!
2. Reach in! Attend class, participate, contribute, interact with colleagues, take risks, talk about what matters.
3. Reach out! Notice “real-life links” to course learnings. Look for “snap shots” that illustrate course concepts. Bring examples to class.
4. Explore serendipitous paths that connect to course learnings. Carry a note pad for jotting down insights/quotes/discoveries.
5. Tap cartoons, news articles, radio broadcasts, movies, the Internet, etc., to enhance your thinking about course learnings. Tour <http://www.area.net>.
6. Incorporate what you are learning into your professional life by teaching your own class/students/children/family various concepts and/or skills.
7. Think about how race, ethnicity, and culture impact your life and your learning experiences. Respectfully talk with diverse others about your and their experiences and perceptions. How do your stories relate to course learnings? Discuss challenges and possibilities.
8. Reflect on your professional knowledge, skills, and dispositions. What are your strengths? What are areas for growth? Map a plan for development.
9. Look for research clues, then read between the lines! When reading scholarly literature, use your knowledge of research approaches, designs, and methods to better understand claims, challenge assumptions, and plan effective practices.
10. Create a Research Notebook with tabbed sections in which to organize materials from this course; use it in your scholarly and professional practice.

Course Instructional Methods

This course employs a range of research-validated instructional methods to promote high-quality learning. Methods include the use of cooperative group strategies, interactive problem solving, collaborative and individual decision making, videotape analysis, scholarly literature analysis, small-group and whole-class discussions, peer editing, personal reflection, self-evaluation, and processing of procedures/participation/outcomes.

Course Expectations

1. Attend class. Come prepared. Participate in all group and individual activities.
2. Maximize your learning as well as the learning of others by providing ideas, respect, support, encouragement, promotive feedback, thoughtful inquiry, and relevant resources.
3. Successfully complete all learning tasks/assignments on time. Contact me before the due date if difficulties arise.
4. Please talk with me about your personal learning needs (e.g., language issues, disabilities, chronic health issues, conditions that may interfere with your learning) so that we can take action for success. Accommodations and/or support services can be arranged through the Learning Center, Loyola 100, (206) 296-5740.
5. Please talk with me immediately about emergency or extraordinary situations (e.g., severe illness, surgery, once-in-a-lifetime opportunity/event) so that we successfully can problem solve.

Research Support Team # _____

Name	Contact Information

Course Requirements

Requirements	Total Points	Your Points
1. References . . . a list of 10 sources relevant to your research topic in APA (5 th ed.) style	10	
2. Reference Notes . . . for 5 sources; use the prototype for each → (5 sources x 5 points each = 25 pts)	25	
3. Summary Chart . . . synthesize across sources; use the prototype → (complete, clear, succinct = 25 pts)	25	
4. Review of the Literature . . . final paper; use the prototype → (see the scoring rubric on p. 11-12)	60	
5. Team Exam . . . quality research is collaborative! <ul style="list-style-type: none"> • Data Collection . . . align research purposes with measures and participants → (10 points) • Critique a Study . . . identify strengths and limitations → (10 points) • Design a Study . . . promote confidence in results → (10 points) 	30	
6. Individual Exam . . . demonstrate that you understand key concepts! <ul style="list-style-type: none"> • Key Concepts . . . multiple choice, short answer, true-false → (50 points) 	50	
TOTAL Course Points	200	

Course Grade

Total Points	Percentage	Grade
180—200	90% – 100%	A
160—179	80% range	B
140—159	70% range	C
120—139	60% range	D
0—119	Below 60%	F

**NOTE: Educational research is challenging! This course is challenging!
Set yourself up for success by fully attending each class session!**

A WORD TO THE WISE:

Those who arrive late, leave early, or are absent tend to struggle in this course. Those who fully participate tend to excel. I will not re-teach material for those absent, so arrange and manage your schedule so that you can fully participate in each class session.

Scoring and Grading Rubrics

Grade	Percentage	Score 60	Score 50	Score 30	Score 25	Score 10	Score 5	Criteria
A	90%-100%	54 – 60	45 – 50	27 – 30	22.5 – 25	9 – 10	4.5 – 5	<ul style="list-style-type: none"> ■ Professional, typed, organized, complete. ■ Knows/Understands/Applies key concepts. ■ Clear, thoughtful, insightful, supported reasoning.
B	80%	48 – 53	40 – 44	24 – 26	20 – 22	8	4	<ul style="list-style-type: none"> ■ <u>Most</u> criteria evident. ■ Needs <u>small</u> revisions to meet criteria.*
C	70%	42 – 47	35 – 39	21 – 23	17.5 – 19	7	3.5	<ul style="list-style-type: none"> ■ <u>Some</u> criteria evident. ■ Needs <u>basic</u> revisions to meet criteria.*
D	60%	36 – 41	30 – 34	18 – 20	15 – 17	6	3	<ul style="list-style-type: none"> ■ <u>Few</u> criteria evident. ■ Needs <u>extensive</u> revisions to meet criteria.*
F	Below 60%	0 – 35	0 – 29	0 – 17	0 – 14	0 – 5	0 – 2.5	<ul style="list-style-type: none"> ■ Not completed or submitted.

* Revisions typically involve completing missing components or elaborating for greater clarity.

Checklist

- All responses are typed
- All items are completed (no blanks or missing components)
- Responses show understanding of the Seven Steps of Research
- Ref Notes & Sum Chart: Step 1 → focus on questions and purpose; include other components if evident in the source
- Ref Notes & Sum Chart: Step 2 → specify source: (a) secondary—specify type of review, (b) primary—specify noncausal or causal and type of design
- Ref Notes & Sum Chart: Step 3 → selection; size; assigned to groups; demographics including age, gender, ethnicity, SES, education, personal characteristics, setting/context, geographic location (e.g., city, state, region, country, continent)
- Ref Notes & Sum Chart: Step 4 → specify IQDOT; valid/reliable; established/new; piloted; coding/scoring; interrater agreement; training for collection/coding
- Ref Notes & Sum Chart: Step 5 → specify type of analysis (quantitative, qualitative, or both); present major findings

Course Schedule

Session #	Date	Readings Due	Course Topics & Exams	Issues	Your Research Inquiry
1	April 2	<p><i>Note:</i> <i>Refer to as needed.</i> Ch. 3 Ch. 4 Ch. 13 Ch. 14</p>	<p>Welcome and Course Overview Seven Steps of Research Library Orientation</p> <hr/> <p><i>Literature Review</i> <i>Internet Resources</i> <i>Discussion/Conclusion: Strengths & Limitations</i> <i>Checklists for Quantitative & Qualitative Studies</i></p>	<p>Questions, Questions, Questions! Searching for answers . . . Where's the evidence? How certain are you? It's all about credibility and confidence—<i>not about proving!</i> Previous knowledge matters! What do we already know? Look at what exists and build upon that foundation.</p>	<p>Focus Your Inquiry <i>Topic → Constructs → Questions</i></p> <p>Begin Your Literature Search <i>Experts → Secondary & Primary Sources</i></p>
2	April 9	Ch. 1 Ch 7	<p><u>Research</u> Steps 1, 2, 3, 4, 5, 6, 7 <u>Measures</u> Step 4: Data Collection</p>	<p>What is measured? Crucial! Are measures aligned with the questions/purposes of the study? Crucial! Crucial!</p>	<p>Continue Your Literature Search obtain secondary and primary sources</p>
3	April 16	Ch. 6	<p><u>Descriptive Statistics</u> Step 5: Data Analysis</p>	<p>Give me the numbers . . . but what do they mean? What exists? What is related?</p>	<p>Submit References a list of 10 sources relevant to your topic in APA (5th ed.) style</p> <p>Begin Reading 5 sources and prepare <u>Reference Notes</u> for each using the prototype</p>
4	April 23	Ch. 10	<p><u>Inferential Statistics</u> Step 5: Data Analysis</p>	<p>Give me the numbers . . . but what do they mean? Statistically significant? Practically significant?</p>	<p>Continue Reading 5 sources and prepare <u>Reference Notes</u> for each using the prototype</p>
5	April 30	Ch. 2 Ch. 5	<p><u>Research Problems</u> Step 1: Question <u>Participants/Subjects</u> Step 3: Sample</p>	<p>Who provides data? Crucial! Are participants aligned with the questions/purposes of the study? Crucial! Crucial!</p>	<p>Continue Reading 5 sources and prepare <u>Reference Notes</u> for each using the prototype</p>

Session #	Date	Readings Due	Course Topics & Exams	Issues	Your Research Inquiry
6	May 7	Ch 8 Ch. 9	<u>Quant / Noncausal Studies</u> Step 2: Design <u>Quant / Causal Studies</u> Step 2: Design	What do noncausal quantitative studies tell you? What do causal quantitative studies tell you? Yikes! Don't let the mathematics of this scare you! Systematically think it through.	Begin Synthesis prepare one <u>Summary Chart</u>
7	May 14	Ch. 11	<u>Qualitative Studies</u> Step 2: Design	Tell me a story . . . the qualitative journey. What does it all mean? Identifying themes/patterns and enhancing credibility through triangulation.	Submit <u>Summary Chart & Reference Notes</u> Begin Writing prepare a draft copy of your <u>Review of the Literature</u>
8	May 21		Scholarly Writing	Communicate clearly and professionally.	Continue Writing Bring to class a draft of your <u>Review of the Literature</u>
9	May 28		■ <u>Team Exam</u>	What's that up there in the sky? Is it a bird? Is it a plane? No, it's SuperResearcher!—i.e., the all-new you, equipped with research tools to skillfully tackle important issues, target key questions, and save the day when it comes to effective decision making based on sound educational research.	Continue Writing Bring to class a draft of your <u>Review of the Literature</u> Seek Feedback Make an appointment with the instructor to get feedback on your draft <u>Review of the Literature</u>
10	June 4	IRB/HSC Handout	Ethics in Research	Safeguard human subjects—always!	Submit <u>Review of the Literature</u>
11	June 11		■ <u>Individual Exam</u>	Use the seven steps of research as tools toward making your practice highly effective, thereby enhancing the lives of those with whom you work.	

Review of the Literature Scoring Rubric

1. APA (5th ed.) Format

- Professional appearance
- Pages properly set up (title page, abstract page, and references page; page header and page numbers throughout)
- Headings and Subheadings (throughout)
- Citations (for *references* and *quotations*)
- References (indentation, spaces, punctuation, italics)
- Numbers (in the text)
- Clear organization of ideas signaled by proper use of APA format—i.e., headings and subheadings

Low	Middle	High
1	2	3
4	5	

2. Introduction

- Capture the attention/interest of readers
- Introduce the overall problem/topic
- Present the overall purpose of the review—i.e., “This review examines . . .”
- Alert readers to the organization of the paper—i.e., “The major sections that follow include . . .”

Low	Middle	High
1	2	3
4	5	

3. Overview of the Problem

- Provide an overview of the problem/topic—i.e., pertinent background information
- Describe current concerns relevant to the problem/topic
- Present research questions that have been investigated/examined in prior studies
- Cite the five sources that are included in this review
- Explain the importance of the topic—i.e., why should people pay attention to it?

Low	Middle	High
1	2	3
4	5	

4. Definition of Terms

- List and define key terms that are commonly used in the literature on the problem/topic
- Note whether general consensus exists within the field/discipline on terms and their definitions
- Note similarities and/or differences among conceptual and operational definitions

Low	Middle	High
1	2	3
4	5	

5. Summary of Research Methods: *Types of Studies*

- Types of Studies*—e.g., quantitative, qualitative, or mixed; descriptive, correlational, comparative, or causal; amount of research conducted (numerous versus few studies); years conducted (current versus a long history of research); and other information pertinent to the types of studies included in this review.

Low	Middle	High
1	2	3
4	5	

6. Summary of Research Methods: *Participants*

- Participants*—e.g., demographics such as age, ethnic/cultural background, socioeconomic status, organizational settings, geographic locations, numbers of participants (large or small samples), and other information pertinent to the participants.

Low	Middle	High
1	2	3
4	5	

7. Summary of Research Methods: Measures

Measures—e.g., types of data collection (IQDOT); scoring/coding; validity/reliability; analysis (quantitative statistics or qualitative techniques).

<u>Low</u>	<u>Middle</u>	<u>High</u>
1	2	3
4	5	

8. Summary of Research Results

Present trends, patterns, themes across results/findings
 Discuss whether results/findings are consistent (or contradictory) across studies/research
 Discuss whether results/findings confirm (or disconfirm) theories relevant to the topic/question

<u>Low</u>	<u>Middle</u>	<u>High</u>
1	2	3
4	5	

9. Strengths

Clearly articulate strengths of the literature on the topic/question
 Comment on the strengths of the existing studies/research/literature
 Comment on the overall quality/credibility of the literature on the topic/question
 Remember the PASSWORD: *Confidence!*

<u>Low</u>	<u>Middle</u>	<u>High</u>
1	2	3
4	5	

10. Limitations

Clearly articulate limitations of the literature on the topic/question
 Comment on the limitations of the existing studies/research/literature
 Comment on the overall quality/credibility of the literature on the topic/question
 Note gaps that occur in the literature
 Remember the PASSWORD: *Confidence!*

<u>Low</u>	<u>Middle</u>	<u>High</u>
1	2	3
4	5	

11. Conclusions/Implications

Articulate implications for practice and/or policy
 Suggest needs for future research

<u>Low</u>	<u>Middle</u>	<u>High</u>
1	2	3
4	5	

12. Quality of Writing

Scholarly professional writing
 Proper use of the English language
 Complete sentences and correct punctuation
 No major grammar or spelling problems
 Correct verb tense (past, present, future)
 Parallel construction in seriations

<u>Low</u>	<u>Middle</u>	<u>High</u>
1	2	3
4	5	

Notice to Students Concerning Disabilities

If you have, or think you may have, a disability (including an “invisible disability” such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to discuss your needs and arrange support services and/or accommodations through Disabilities Services staff in the Learning Center, Loyola 100, (206) 296-5740.

Notice to Students Concerning Seattle University’s Academic Honesty Policy

The new (January 5, 2004) Academic Honesty Policy of the university is available in the *Seattle University Student Handbook* which can be found on the web site of the Division of Student Development at the following URL: <http://www.seattleu.edu/studentdevelopment/>

Grading Grievance Procedure for Challenging Course Grades

This grade grievance policy and procedure defines the policies and outlines the processes that govern in those cases when a student wishes to grieve a final course grade. A copy of this grading grievance policy and procedure document can be found at the following URL: <http://www.seattleu.edu/registrar/page.aspx?ID=194>

Fair Process Policy for the Colleges of Education, Arts and Sciences, and Nursing

The purpose of this policy is to define the appeal policies and processes related to the following decisions: retaining or graduating a student; permitting a student to enter or continue in a practicum, an internship, or student teaching; or recommending a student for a professional certificate. A copy of the fair process policy can be found in the *SU Student Hand book* and is available for download from the following URL: <http://seattleu.edu/studentdevelopment/> or <http://www.seattleu.edu/registrar/page.aspx?ID=185>

Notice to Students Regarding Course Alignment with State and Professional Standards

This course is aligned with the Washington Administrative Code [WAC 180-78A-240(2)(b)] and the Interstate School Leaders Licensure Consortium (ISLLC) Standards which can be found in the Seattle University College of Education Administration Program Student Handbook or at the following URL: <http://www.seattleu.edu/coe/edadmin/>

Seattle University – College of Education
EDUC 500 – Introduction to Educational Research and Graduate Study – Summer Quarter 2008

Name:

Address:

Telephone:

E-mail:

Degrees and/or Credentials Earned:

Degree and/or Credential Working Towards:

Program:

Advisor:

Research Interests:

Research Experience:

Current Profession / Role:

Career Goal:

Special Skills / Areas of Expertise:

Motivation for Taking this Course: