

## **ELE 5250: Research in Education**

**Tuesdays**

**4:30-7:00 pm**

**1430 Buzzard**

**Professor:** Dr. Dale

**Office:** 2219 Buzzard

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**Office Hours:** T/TH 10:00-11:00; 12:15-1:00; W 9:00-10:30; or by appointment

**Phone:** 217-581-7889

**Unit Theme:** Educator as Creator of Effective Educational Environments: Integrating Diverse Students, Subject, Strategies, Societies and Technologies.

### **Graduate Mission Statement:**

The Graduate Program in Elementary Education advances scholarly preparation by providing quality teaching and promoting excellence in research/creative activity in order for graduate students to exemplify best teaching practices for children from birth through age fourteen. The graduate curriculum encompasses comprehensive content knowledge and promotes the use of critical thinking and problem solving to cultivate teacher-researchers who are empowered to serve as leaders in the profession. Faculty members challenge students to bridge the gap between theory and practice as they develop the skills required for ethical and effective collaboration and communication within the local school community and a culturally diverse, technologically advanced global environment.

### **Outcomes for all Graduate Students at Eastern Illinois University:**

Graduate students will:

1. possess a depth of content knowledge including effective technology skills and ethical behaviors;
2. engage in critical thinking and problem solving;
3. exhibit effective oral and written communication skills;
4. engage in advanced scholarship through research and/or creative activity;
5. demonstrate an ability to work with diverse clientele, recognizing individual differences; and
6. collaborate and create positive relations within the school, community and profession in which they work.

### **Information Processing Models:**

*Information-processing* models emphasize ways of enhancing the human being's innate drive to make sense of the world by acquiring and organizing data, sensing problems and generating solutions to them, and developing concepts and language for conveying them. (pp. 25-28)

Joyce, B., Weil, M. & Calhoun, E. (2009). *Models of teaching* (8<sup>th</sup> ed.). Boston: Pearson.

### **International Society for Technology in Education (ISTE)**

Standards for Students (2007)

[http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS\\_for\\_Students\\_2007.htm](http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm)

Standards for Teachers (2008)

[http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS\\_for\\_Teachers\\_2008.htm](http://www.iste.org/Content/NavigationMenu/NETS/ForTeachers/2008Standards/NETS_for_Teachers_2008.htm)

**Course Description:** (3-0-3) Provides experiences in defining problems and in using research techniques in writing, interpreting, and evaluating research in elementary education.

**Purpose of the Course:** This course covers introductory material as critical consumers of research in preparation for being creators of research. It will serve as an overview of trends and issues, terminology, methods, approaches, and techniques for research. The thesis (ELE 5950) or applied/action research (ELE 5900) will be the culminating application of research concepts learned within this course.

### **Course Outcomes:**

- Explore various types of academic research as to their usefulness for best practice in the field.
- Use an inquiry-based framework for identifying, synthesizing and critiquing quality research studies including meta-analyses.
- Explore issues such as dispositions, ethics, social justice, and diversity as these pertain to educational research.
- Examine information on pedagogy, assessment, and evaluation as well as current issues in education through a research lens.

- Engage in scholarly writing.
- Articulate and define one’s own philosophical, sociological, and psychological perspectives in light of research.
- Interpret psychometric statistics including types of test scores, measures of central tendency, indices of variability, standard errors and correlations, etc.

**Textbooks:**

American Psychological Association (2010). *Publication manual of the American Psychological Association* (6<sup>th</sup> ed.).

Washington, DC: American Psychological Association.

Jones, W. P., & Kottler, J. A., (2006). *Understanding research: Becoming a competent and critical consumer*. New

Jersey: Pearson Education.

**Supplemental Materials:** WebCT

Course (Core) Requirement	Demonstrated Competencies	Graduate Standards
Individual/Group presentation on Research concepts	Students will demonstrate the ability to synthesize and present key research concepts to peers.	1.a. a depth of content knowledge in the discipline 1.b. effective use of technology as appropriate 3.a. effective oral communication skills 3.b. effective written communication skills 3.c. effective, fair and honest communication considering not only the message, but the audience
APA Exercises	Students will demonstrate the ability to use the APA style format in their writing.	1.d. an understanding and respect for professional ethics in the discipline 1.e. a respect for the professional environment through their honesty, integrity and professionalism
Reflection on Research: Connections to One’s Own Practice	Students will demonstrate the ability to reflect on the connections between research and their own practice.	1.c. the ability to apply content knowledge to practice 2.a. critical thinking and problem solving 2.b. the ability to effectively evaluate situations and identify an appropriate course of action 3.b. effective written communication skills 4.a. an understanding of the role of research in the discipline
Research Article Reviews	Student will demonstrate the ability to use on-line search engines to search for three research studies and synthesize relevant information. One research article will be a quantitative study, one will be a qualitative study and the third will be an action research study. Students will be required to use the most current APA manual.	1.a. a depth of content knowledge in the discipline 1.b. effective use of technology as appropriate 1.c. the ability to apply content knowledge to practice 2.a. critical thinking and problem solving 3.b. effective written communication skills 4.a. an understanding of the role of research in the discipline

Course (Core) Requirement	Demonstrated Competencies	Graduate Standards
Public Data Review	Students will demonstrate the ability to critically examine publicly available education-related data and write a summative report. Students will be required to use the most current APA manual.	<ul style="list-style-type: none"> <li>1.b. effective use of technology as appropriate</li> <li>1.d. an understanding and respect for professional ethics in the discipline</li> <li>1.e. a respect for the professional environment through their honesty, integrity and professionalism</li> <li>2.a. critical thinking and problem solving</li> <li>2.b. the ability to effectively evaluate situations and identify an appropriate course of action</li> <li>3.b. effective written communication skills</li> <li>3.c. effective, fair and honest communication considering not only the message, but the audience</li> <li>4.a. an understanding of the role of research in the discipline</li> </ul>

Although graduate courses may have common assignments (e.g., critiques of journal articles, literature reviews, or research papers), the overall goal of the program in elementary education is to provide a “spiral curriculum”. The class assignments submitted by a graduate student must provide evidence of growth and advancement by building upon prior coursework, but not duplicating previous projects, experiences, or materials.

Course (Core) Requirement	Brief Description	Point Values (Approximate Weight)	Due Dates
Individual/Group presentations on Research Concepts (2)	Student/s will be assigned a research concept/s that they will synthesize for class presentation.	15 points each (20%)	Due dates vary
APA Exercises	Students will be engaged in practice exercises to develop competency in APA style format.	P/F	Due dates vary
Public Data Review	Students critically examine publicly available education-related data and write a summative report. Students will be required to use the most current APA manual.	25 points (15%)	Oct. 16
Reflection on Research: Connections to One’s Own Practice	Students will write a reflective paper on how research will inform their practice using the Group Research Design Project as a point of reference.	35 points (25%)	Dec. 11

Course (Core) Requirement	Brief Description	Point Values (Approximate Weight)	Due Dates
Research Article Reviews (3)	Students will find a total of three research articles (from peer-reviewed journals) to interpret, summarize and reflect upon. One research article will be a quantitative study, one will be a qualitative study and the third will be an action research study. Students will be required to use the most current APA manual.	15 points each (30%)	Oct. 23 Nov. 6 Nov. 27
Book Talk	Students will select an educational book, read it, write a report following the template provided and present it to the class	15 points (10%)	Due dates vary

**Total points possible: 150**

**Grading Scale:** A = 93% or above =      B = 85-92% =      C = 77-84% =      D = 69-76% =      Below 69% = F

The Department of EC/ELE/MLE is committed to the learning process and academic integrity as defined within the Student Conduct Code Standard I. “Eastern students observe the highest principles of academic integrity and support a campus environment conducive to scholarship.” Students are expected to develop original and authentic work for assignments submitted in this course. “Conduct in subversion of academic standards, such as cheating on examinations, plagiarism, collusion, misrepresentation or falsification of data” or “submitting work previously presented in another course unless specifically permitted by the instructor” are considered violations of this standard.

### Weekly Schedule

Class Session	Session Content	Reading Assignment	Due
<b>1: Aug 21</b>	<ul style="list-style-type: none"> <li>What is research?</li> <li>Discuss and Select Research Concepts/Dates</li> <li>Begin discussion of possible research questions for Group Research Design</li> </ul>	<b>Chapter 1 (intro)</b>	
<b>2: Aug 28</b>	<ul style="list-style-type: none"> <li>What is research? (continued)</li> <li>On-line research at EIU</li> <li>Complete discussion on research questions for Group Research Design</li> <li>Preparation for Collaborative Literature Review for Group Research Design</li> </ul>	<b>Chapter 2 (research question)</b>	<ul style="list-style-type: none"> <li><b>Bring 5 possible research questions electronically</b></li> </ul>
<b>3: Sept 4</b>	<ul style="list-style-type: none"> <li>Begin to work on outlining Collaborative Literature Review as a class</li> <li>Practice APA reference page format for articles/books brought in for Collaborative Literature Review for Group Research Design</li> </ul>	<b>Bring in 2 academic books or peer-reviewed articles related to Common Core Standards -- be sure to have outline notes as discussed in class</b>	<ul style="list-style-type: none"> <li><b>Ethnographic Presentation</b></li> <li><b>Longitudinal Presentation</b></li> <li><b>Experimental Presentation</b></li> </ul>
<b>4: Sept 11</b>	<ul style="list-style-type: none"> <li>Discuss both handbooks</li> <li>Complete in-class Collaborative Literature Review (if necessary) – assign sub-sections for independent work [ 5 students]</li> </ul>	<b>Action Research Handbook and Thesis Handbook</b> on-line (WebCT or dept. website)	<ul style="list-style-type: none"> <li><b>Historical Presentation</b></li> <li><b>Case Study Presentation</b></li> <li><b>Phenomenological Presentation</b></li> </ul>

<b>Class Session</b>	<b>Session Content</b>	<b>Reading Assignment</b>	<b>Due</b>
<b>5: Sept 18</b>	<ul style="list-style-type: none"> <li>• Begin to discuss other parts of Group Research Design project (rationale, participants, IRB concerns, data collection strategies (instruments), triangulation and ways of presenting data results) – assign sub-sections for independent work [5 students]</li> <li>• Work time for Literature Review Group and Other Sections Group</li> </ul>	<b>Bring electronic copies of drafts of sub-sections for Collaborative Literature Review Group [5 students]</b>	<ul style="list-style-type: none"> <li>• <b>Reliability and Validity Presentation</b></li> <li>• <b>Meta-Analysis Presentation</b></li> <li>• <b>Sampling and Collection Procedures Presentation</b></li> </ul>
<b>6: Sept 25</b>	<ul style="list-style-type: none"> <li>• Complete discussion of other parts of Group Research Design project</li> <li>• Begin to analyze a qualitative research study (participant sample)</li> <li>• APA Manual – Overview (Other Sections Group)</li> <li>• Reflection Time for Other Sections Group while Literature Review Group finalizes their copy</li> <li>• Discuss Public Data Review assignment</li> </ul>	<p><b>Chapter 3 (participant sample)</b></p> <p><b>Bring electronic copies of drafts of sub-sections for Other Sections Group [5 students]</b></p> <p><b>Bring in 1 peer-reviewed educational research study that uses (primarily) a qualitative research design</b></p>	<ul style="list-style-type: none"> <li>• <b>Electronic copy of completed sub-sections of Collaborative Literature Review for the Group Research Design Project [5 students]</b></li> </ul>
<b>7: Oct 2</b>	<ul style="list-style-type: none"> <li>• Analyze qualitative research study (procedures and instrumentation sections)</li> <li>• APA Manual – Overview (Collaborative Literature Review Group)</li> <li>• Reflection time for Literature Review Group while Other Sections Groups finalizes their copy</li> <li>• Begin to work on Public Data Review</li> </ul>	<b>Chapter 4 (procedures and instrumentation)</b>	<ul style="list-style-type: none"> <li>• <b>Electronic copy of completed sub-sections of other sections of the Group Research Design Project [ 5 students]</b></li> </ul>
<b>8: Oct 9</b>	<ul style="list-style-type: none"> <li>• Analyze qualitative research study (results section)</li> <li>• Work on Public Data Review</li> </ul>	<b>Chapter 5 pages 102 to 106 only</b>	<ul style="list-style-type: none"> <li>• <b>Dependent and Independent Variables Presentation</b></li> <li>• <b>Quantitative and Categorical Variables Presentation</b></li> <li>• <b>Extraneous Variables Presentation</b></li> </ul>
<b>9: Oct 16</b>	<ul style="list-style-type: none"> <li>• Analyze qualitative research study (discussion section)</li> <li>• SPSS Training – 5:30-6:45 pm in _____</li> </ul>	<b>Chapter 6 (discussion)</b>	<ul style="list-style-type: none"> <li>• <b>Public Data Review</b></li> </ul>
<b>10: Oct 23</b>	<ul style="list-style-type: none"> <li>• Begin to analyze a quantitative research study (participant sample, procedures &amp; instrumentation sections)</li> <li>• APA Manual – Exercise 1</li> </ul>	<p><b>Chapter 5, part 1 (pages 102-111)</b></p> <p><b>Bring in 1 peer-reviewed educational research study that uses (primarily) a quantitative research design</b></p>	<ul style="list-style-type: none"> <li>• <b>Qualitative Article Analysis (see chapter 7)</b></li> <li>• <b>Book Talk 1</b></li> <li>• <b>Book Talk 2</b></li> </ul>
<b>11: Oct 30</b>	<ul style="list-style-type: none"> <li>• Analyze a quantitative research study (results and discussion sections)</li> <li>• APA Manual – Exercise 2</li> </ul>	<b>Chapter 5, part 2 (pages 111-131)</b>	

<b>Class Session</b>	<b>Session Content</b>	<b>Reading Assignment</b>	<b>Due</b>
<b>12: Nov 6</b>	<ul style="list-style-type: none"> <li>• Begin analyzing an action research study (participant sample, procedures &amp; instrumentation sections)</li> <li>• APA Manual – Exercise 3</li> </ul>	<b>Bring in 1 peer-reviewed educational research study that uses an action research design</b>	<ul style="list-style-type: none"> <li>• <b>Quantitative Article Analysis (see chapter 7)</b></li> <li>• <b>Book Talk 3</b></li> <li>• <b>Book Talk 4</b></li> </ul>
<b>13: Nov 13</b>	<ul style="list-style-type: none"> <li>• Analyze an action research study (results and discussion sections)</li> <li>• APA Manual – Exercise 4</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Book Talk 5</b></li> <li>• <b>Book Talk 6</b></li> </ul>
<b>Nov 20 NO CLASS</b>			
<b>14: Nov 27</b>	<ul style="list-style-type: none"> <li>• See the Group Research Design in its entirety – discuss process, what to watch for in own research, consider practical issues, reflect</li> <li>• Discuss Reflection on Research Connections Paper</li> <li>• APA Manual – Exercise 5</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Action Research Article Analysis (see chapter 7)</b></li> <li>• <b>Book Talk 7</b></li> <li>• <b>Book Talk 8</b></li> </ul>
<b>15: Dec 4</b>	<ul style="list-style-type: none"> <li>• Begin work on Reflection on Research Connections Paper</li> <li>• APA Manual – Exercise 6</li> </ul>		<ul style="list-style-type: none"> <li>• <b>Book Talk 9</b></li> <li>• <b>Book Talk 10</b></li> </ul>
<b>FINAL EXAM Tuesday Dec 11 5:15-7:15 pm</b>			<ul style="list-style-type: none"> <li>• <b>Reflection on Research Connections to One's Own Practice -- submit electronically through WebCT; due by 7:15 pm</b></li> </ul>

Written guidelines for class assignments provided in another document.

## Bibliography

\*Denotes Unit Conceptual Framework References

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#### **Recommended Peer-Reviewed Journals:**

*A Review of Research in Education* - AERA (American Educational Research Association)

*American Educational Research Journal* - AERA

*Eastern Educational Journal* - Eastern Illinois University. Charleston, IL.

*Educational Researchers* - AERA

*Educational Action Research* - CARN (Collaborative Action Research Network)

*Review of Educational Research* - AERA