

Eastern Illinois University
Early Childhood, Elementary and Middle Level Education
ELE 5250: Research in Education

Semester: Fall 2016

Credit hours: 3

Prerequisites: Admission to graduate school

Instructor: Dr. J. Bickford

Office: 2174 Buzzard

E-mail: jbickford@eiu.edu

Office Hours: M & W 12-1; T 3:30-4:30 & 7-8

Phone: 217-581-5728 (Messages only)

Class Meetings: Tuesdays 4:40-7 pm in 1445

Dr. Sham'ah Md-Yunus

2203 Buzzard

smdyunus@eiu.edu

M-W: 2-4 pm

217-581-5728 (Messages only)

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. 10-13)

Joyce, B., Weil, M. & Calhoun, E. (2015). *Models of teaching* (9th ed.). Boston: Pearson.

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* (6th ed.).

Washington, DC: American Psychological Association.

Patten, M.L. (2014). *Understanding Research Methods* (9th ed.). Glendale, CA: Pyrczak Publishing.

Supplemental Materials:

Action Research Handbook (Available at <http://www.eiu.edu/elegard/Action%20Research%20Handbook%20-%20March%2027%202015%20Final%20Version.pdf>)

Thesis Manual (Available at http://www.eiu.edu/graduate/pdf/thesisresearch_manual.pdf)

Research in Action (Online Department Journal available at <http://www.eiu.edu/researchinaction/index.php>)

Course (Core) Requirement	Demonstrated Competencies	Graduate Standards
IRB Human Subjects Training	<p>The student will:</p> <ul style="list-style-type: none"> know the guidelines for human subject protection and ethical issues <p>The student will:</p> <ul style="list-style-type: none"> complete the EIU on-line training for IRB (Human Subjects) review IRB Form B to ensure that planned research falls under exempt category 	<p>1.d. an understanding and respect for professional ethics in the discipline</p> <p>4.a. an understanding of the role of research in the discipline</p>
Individual/Group presentation on Research concepts	Students will demonstrate the ability to synthesize and present key research concepts to peers.	<p>1.a. a depth of content knowledge in the discipline</p> <p>1.b. effective use of technology as appropriate</p> <p>3.a. effective oral communication skills</p> <p>3.b. effective written communication skills</p> <p>3.c. effective, fair and honest communication considering not only the message, but the audience</p>
APA Exercises	Students will demonstrate the ability to use the APA style format in their writing.	<p>1.d. an understanding and respect for professional ethics in the discipline</p> <p>1.e. a respect for the professional environment through their honesty, integrity and professionalism</p>
Understanding data-driven decision making in education	Students will demonstrate the ability to critically examine and interpret education-related data. Students will be required to use the most current APA manual.	<p>1.b. effective use of technology as appropriate</p> <p>1.d. an understanding and respect for professional ethics in the discipline</p> <p>1.e. a respect for the professional environment through their honesty, integrity and professionalism</p>

		<ul style="list-style-type: none"> 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 3.c. effective, fair and honest communication considering not only the message, but the audience 4.a. an understanding of the role of research in the discipline
Review of Relevant Literature	<p>Student will demonstrate the ability to use on-line resources to search for research studies and synthesize relevant information related to a specific topic. Research articles need to include quantitative, qualitative, and action research studies. Students will be required to use the most current APA manual.</p>	<ul style="list-style-type: none"> 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
Autobiographical Reflection on Research Connections to One's Own Practice	<p>Students will write a reflective paper analyzing how their educational and experiential background might direct their line of research which will inform their practice (implications for practice).</p>	<ul style="list-style-type: none"> 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.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 4.a. an understanding of the role of research in the discipline
Participation	<p>Performance includes presence and contribution during class meetings. Focus is on responsible, enthusiastic, and effective communication. Daily attendance is expected in order to participate in class activities.</p>	<ul style="list-style-type: none"> 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 5.a. an understanding of individual differences in clientele 5.b. a respect for all clientele by fostering a supportive and encouraging atmosphere in their workplace 6.a. the ability to collaborate with other professionals to promote success of their clientele

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
IRB Human Subjects Training	The student will complete the EIU on-line training for IRB (Human Subjects) and review IRB Form B to ensure that planned research falls under the exempt category.	5 pts. (5%)	In-class 12/6
Individual/Group presentation on Research Concepts	Student/s will be assigned a research concept that they will synthesize for class presentation.	10 pts. (10%)	In-class on 11/18
APA Exercises	Students will be engaged in practice exercises to develop competency in APA style format.	10 pts. (10%)	In-class on 11/29
Understanding data-driven decision making in education	Students will demonstrate the ability to critically examine and interpret education-related data. Students will be required to use the most current APA manual.	15 pts. (15%)	In –class on 9/13, 9/20 & 9/27
Review of Relevant Literature	Students will find research articles (from peer-reviewed journals) to interpret, summarize and reflect upon. Articles must include both quantitative and qualitative studies. Students will be required to use the most current APA manual.	35 pts. (30%)	1 st draft (5 pts): 9/11 2 nd draft (5 pts): 10/2 3 rd 7final draft (25 pts): 12/4
Autobiographical Reflection on Research Connections to One’s Own Practice	Students will write a reflective paper analyzing how their background might direct their line of research which will inform their practice (implications for practice).	15 pts. (20%)	12/13
Participation	Students will actively engage in class discussions and activities	10 pts. (10%)	Every class meeting

Instructor’s Policies for the Course (i.e., attendance and late assignments):

Grading Scale: 93% or above = A 85-92% = B 77-84% = C 69-76% = D Below 68% = 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.

Students with Disabilities- If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Student Disability Services (OSDS). All accommodations must be approved through OSDS. Please stop by Ninth Street Hall, Room 2006, or call 217-581-6583 to make an appointment.

Course Outline

Class Session	Topic(s)	Readings & Assignments
Week 1 8/23	Course Introduction Characteristics of Research Rationale for the Use of Research Use of Research in American Schools and Classrooms How research has informed practice in education: Review of What Works Clearing House: http://ies.ed.gov/ncee/wwc/	APA Chapter 1 Patten -U.R.M. topics 1-4 Bring two potential, tentative topics of interest
Week 2 8/30	Begin discussion about APA format Rationale for using APA style Review of the APA Manual Identify elements of professional writing Practice APA style through in-class exercises	APA Chapter 2 Patten -U.R.M. topics 5-8
Week 3 9/6	Searching for Research Publications Online Technology Tools and services for Research Resources available at EIU: Library Presentation on searching for Research on-line. Booth 4450 http://ies.ed.gov/ncee/wwc http://www.library.eiu.edu/welcome.php Selecting articles for reviews Explore individually to select articles for review Differentiating between kinds of research Differentiating between kinds of professional writing	APA Chapter 3 Patten -U.R.M. topics 9-13 & Appendix A Refine topic of interest 1 st lit review submission 9/11 in d2l, 5 pts
Week 4 9/13	Research publications Use of research in education Overview of elements of research reports Selecting articles for reviews Research questions Motivations for research Importance of question formulation Developing questions for research Identifying the research strategy based on the questions Characteristics of good research questions	Data driven decision making assignment due in class, first presentation on 9/13, 15 points
Week 5 9/20	Literature Review Value of Literature review APA considerations for literature review	APA Chapter 4 Patten -U.R.M. topics 14-19 Data driven decision making assignment due in class, second presentation on 9/20, 15 points
Weeks 6,7 & 8	Qualitative Approach of Research: Sampling & measurement	Patten -U.R.M. topics 64-70 2 nd . Lit review submission -

9/27, 10/4, & 10/11	Data analysis: Coding interviews (slave narratives); Coding students' assessments (Venn Diagram and Timelines); Content analysis trade books & textbooks; Olweus survey results Developing anonymous survey	10/2- 5 pts. In d2l Data driven decision making assignment due in class, third presentation on 9/27, 15 points
Weeks 9,10 & 11 10/18,10/25, & 11/1	Quantitative approach of Research: Reliability & Validity of quantitative approach Rationale, purpose, research questions & hypotheses Methods: Sampling procedures Different kinds of sampling methods Rationale for selecting samples Instruments Data Source and data collection procedures Data analysis Statistics Role of statistics Ways of summarizing data Measures of central tendency & variability Descriptive statistics Inferential statistics Overview of SPSS Excel spreadsheet	APA Chapter 5 APA Table1, p. 247 Patten -U.R.M. topics 27-31 Patten -U.R.M. topics 20-26 Patten -U.R.M. topics 43-57
Week 11 11/1	Qualitative vs. Quantitative vs. Mixed methods	
Week 12 11/8	Considerations when reporting results, implications, limitations and recommendations Interpreting Public Data Reports	APA Chapters 5 & 6 Patten- Topics 71-78
Week 13 11/15	Action Research vs. Thesis Introduction and discussion of Thesis Manual and Action Research handbook Action Research; http://www.eiu.edu/researchinaction/index.php http://www.eiu.edu/elegrad/resources.php Thesis Manual: http://www.eiu.edu/graduate/pdf/thesisresearch_manual.pdf and http://www.eiu.edu/graduate/students_thesisresearch.php	
Week 14 11/29	Ethics of Research & Institutional Review Board (IRB)	IRB in –class, 12/6, 5 pts.
Week 15 12/6	Reflection Making connections between research and one's own practice	Lit review final due on 12/4 in d2l, 25 pts Autobiographical Reflections (outline of the action research/thesis proposal), 15 points, due on 12/13 in d2l

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Bibliography

*Denotes Unit Conceptual Framework References

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New Directions in Mixed Methods Research, 13(1), 93-99.

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Recommended Peer-Reviewed Journals:

American Educational Research Journal - AERA

Educational Action Research - CARN (Collaborative Action Research Network)

Educational Researchers - AERA

Mixed Methods International Research Association <http://mmira.wildapricot.org>

Association for Qualitative Research <http://aqr.org.au>

AERA Qualitative SIG <http://aeraqrsig.org>

Review of Educational Research – AERA (American Education Research Association)

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