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

Semester: Fall 2017 Credit hours: 3 Prerequisites: Admission to graduate school

Instructor: Dr. Sham'ah Md-Yunus Office: 2203 Buzzard Hall E-mail: smdyunus@eiu.edu

Office Hours: M & Th: 1-4 pm **Phone**: 217-581-5728 (Messages only)

Class Meetings: Wednesdays, 4:30-7:00 pm in Buzzard 1445

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:

- 1. Patten, M.L. (2014). *Understanding Research Methods* (9th ed.). Glendale, CA: Pyrczak Publishing.
- 2. American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

Supplemental Materials:

Action Research Handbook (Available at http://www.eiu.edu/elegrad/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	The student will: • know the guidelines for human subject protection and ethical issues The student will: • complete the EIU on-line training for IRB (Human Subjects) • review IRB Form B to ensure that planned research falls under exempt category	1.d. an understanding and respect for professional ethics in the discipline 4.a. an understanding of the role of research in the discipline
Individual/Group presentation and discussions on Research concepts and type of Research	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

Understanding data-driven decision making and interpretation 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.	1.b. effective use of technology as appropriate 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 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	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.	 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 by developing a prospectus for Action Research or Thesis	Students will write a prospectus paper analyzing how their educational and experiential background might direct their line of research which will inform their 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.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	Performance includes presence and contribution during class meetings. Focus is on responsible, enthusiastic,	1.d an understanding and respect for professional ethics in the discipline

and effective communication. Daily attendance is expected in order to participate in class activities.	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 [Details of the assignments are describe in the Course Assignment]	Point Values (Approximate Weight)	Due Dates
Type of Research	Identify type of research based on research studies.	5 pts (5%)	9/10/2107
Understanding data-driven decision making in education	Students will demonstrate the ability to critically examine and interpret education-related data.	10 pts. (10%)	10/1/2017
APA Exercises	Students will be engaged in practice exercises to develop competency in APA style format.	5 pts. (10%)	9/24/2017
Data Analysis	Analyze two statistical analysis for the quantitative data and two data analysis for qualitative data.	20 pts. (20%)	10/29/2017
Review of Relevant Literature	Students will write a literature review on topic they plan to write for Action Research or Thesis based on a minimum of ten (from peerreviewed research 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.	15 pts. (15%)	12/3/2017
Action Research or Thesis Prospectus	Students will write a prospectus for Action Research or Thesis. Components include title, purpose/objectives, research questions, hypotheses, theoretical framework, and methods (sample, instrument, data collection procedures, data analysis, and reference list).	30 pts. (30%)	12/1/2017

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 %)	12/6/2017
Participation and Attendance	Students will present and actively engage in class discussions and activities	5 pts. (5%)	Every class meeting

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

Attendance Policy: Attendance is **mandatory** for this class. If you absent, please bring proof of absences and I will allow you to do a "make-up work." Further, you need to check in the syllabus and/or your classmates what were discussed in class. To do make-up, go to https://works.bepress.com/shamah_md-yunus/and choose article. Summarize one page, double line spacing, print hard copy and submit it to me.

Late Assignment Policy: This class utilized the D2L. All assignments are due on the date indicated in the D2L and must submit in D2L. **NO LATE WORK WILL BE ACCEPTED**

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	Course Introduction	
8/23	Characteristics of Research	APA Chapter 1
	Type of Research	Patten -U.R.M. topics 1-4
	Rationale for the Use of Research	Patten -U.R.M. topics 41-46
	Use of Research in American Schools and Classrooms	
	How research has informed practice in education: Review of What	Bring two potential,
	Works Clearing House: http://ies.ed.gov/ncee/wwc/	tentative topics of interest
	Interpreting Public Data Reports	for Action Research or
		Thesis project
	Practice: research studies from http://ies.ed.gov/ncee/wwc/	
		Patten -U.R.M: Appendix A
Week 2	Begin discussion about APA format	
8/30	Rationale for using APA style	APA Chapter 2
	Review of the APA Manual	Patten -U.R.M. topics 5-8
	Identify elements of professional writing	

	Practice APA style through in-class exercises	Patten -U.R.M. Appendix I
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	APA Chapter 3 Patten -U.R.M. topics 9-13 & Appendix A
	http://ies.ed.gov/ncee/wwc http://www.library.eiu.edu/welcome.php Selecting articles for reviews	Refine topic of interest
	Explore individually to select articles for review Differentiating between kinds of research	Patten -U.R.M: Appendix A
	Differentiating between kinds of professional writing	Patten -U.R.M. topics 2-4
Week 4 9/13	Research publications -Overview of elements of research reports -Selecting articles for reviews	Patten -U.R.M. topics 5-13
	Identify type & approach of research Abstract for research Developing purpose and rationale for the research Developing questions for research	
	Identifying the research methodology based on the questions Characteristics of good research	
	Practice: Develop rationale, purpose of research and formulate research questions for Action Research or Thesis	
Week 5 9/20	Literature Review -Reviewing and analyzing component of literature -APA considerations for literature review	APA Chapter 4
	Practice: Developing theoretical framework for Action Research or Thesis	Patten -U.R.M. topics 14-19 Patten -U.R.M. topics 20-23
Week 6	Quantitative Approach of Research:	Patten -U.R.M: Appendix C
9/27	-Reliability & Validity of quantitative approach -Rationale, purpose, research questions & hypotheses	Patten -U.R.M. topics 31-40
	Practice: checking the reliability and validity of instruments will be used for Action Research or Thesis	
Week 7 10/4	Quantitative Approach of Research: continued Methods:	Patten -U.R.M. topics 24-30
	-Sampling procedures -Different kinds of sampling methods -Rationale for selecting samples -Instruments	64-70 Patten -U.R.M. topics 24-30
	-Data Source and data collection procedures -Results -Considerations when reporting results, implications, limitations and recommendations	

	T	T
	Practice: Write; 1. Methods-sample and instrument 2. Data collection procedures	Patten -U.R.M. topics 75-82
Week 8 10/11	Quantitative Approach of Research: continued Data analysis -Statistics -Role of statistics -Ways of summarizing data -Measures of central tendency & variability -Descriptive statistics -Inferential statistics	Patten -U.R.M. topics 47-61 Patten -U.R.M. topics 62-74
	Overview of SPSS Excel spreadsheet	
	 Practice: Find mean, standard deviation, Person correlation, t-tests, and chi-square using SPSS Create data in spreadsheet and practice bar graphs, pie charts and line graphs. Practice how and what to interpret data from the SPSS and graphs. 	Patten -U.R.M. topics 79-81 Patten -U.R.M: Appendix B, Appendix D
Week 9 10/18	Qualitative Approach of Research: Design Methods Sampling & instrument/ measurement Practice: design, sampling, and instrument	Patten -U.R.M. topics 68-74
Week 10 10/25	Qualitative Approach of Research: Continued Data analysis Results Considerations when reporting results, implications, limitations and recommendations Practice: create coding/code book	Patten -U.R.M. topics 68-74 Patten -U.R.M: Appendix F, Appendix H
Weeks 11 11/1	Qualitative vs. Quantitative vs. Mixed methods -Characteristics of mixed- method research	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 12 11/8	Action Research vs. Thesis Introduction and discussion of Thesis Manual and Action Research handbook	Patten -U.R.M: Appendix G
	Action Research; http://www.eiu.edu/researchinaction/index.php http://www.eiu.edu/elegrad/resources.php	

Week 13	Thesis Manual: http://www.eiu.edu/graduate/pdf/thesisresearch_manual.pdf and http://www.eiu.edu/graduate/students_thesisresearch.php Developing Prospectus for Action Research or Thesis - first draft due Refining Prospectus for Action Research or Thesis - final draft due Negrober 22 Theories in the Prospectus Prospectus for Action Research or Thesis - final draft due The prospectus for Action Research or Thesis - final draft due	APA Chapters 5 & 6
Week 14 11/29 Week 15	November 22, Thanksgiving Break –No School Literature Review: - Checking all the APA formats - Final Draft due Ethics of Research & Institutional Review Board (IRB)	Patten- Topics 71-78 APA check sheet Due in class on 12/6.

Bibliography

*Denotes Unit Conceptual Framework References

- Allen, L. & Calhoun, E.F. (1998). School wide action research: Findings from six years of study. *Phi Delta Kappan*, 79(9), 706-710.
- *Bogdan, R. & Biklen, S. (1998). Qualitative research in education: An introduction to theory and methods (3rd ed.).

 Boston: Allyn & Bacon.
- Bullough, R., V., & Gitlin, A. D. (2001). *Becoming students: Linking knowledge production and practice of teaching* (2nd ed.) New York: Routledge.
- Buysse, V., Sparkman, K.L., & Wesley, P.W. (2003). Communities of practice: Connecting what we know with what we do. *Exceptional Children*, 69, 263-277.
- Calhoun, E. F. (2002). Action research for school improvement. Educational Leadership, 59(6), 18-24.
- Clancy, D. (2001). Studying children and schools. Qualitative research traditions. Prospect Heights, IL: Waveland Press.
- Chick, K. (2006). Gender balance in k-12 American history textbooks. *Social Studies Research and Practice*, 1(3), 284-290.
- Chick, K. & Corle, S. (2012). A gender analysis of NCSS Notable Trade Books for the intermediate grades. *Social Studies Research and Practice*, 7(2), 1-14.

- Chick, K., Slekar, T., & Charles, E. (2010). A gender analysis of NCSS Notable picture book winners: 2006-2008. *Social Studies Research and Practice*, 5(3), 21-31.
- Cole, A. L., & Knowles, J. G. (2000). Researching teaching: Exploring teacher development through reflexive inquiry.

 Boston: Allyn and Bacon.
- Cone, J. D. & Foster, S. L. (2006). *Dissertations and theses from start to finish: Psychology and related fields* (2nd ed.). Washington, D.C.: American Psychological Association.
- *Cronbach, L. (1959). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Denzin, N.K. & Lincoln, Y.S. (Eds.). (2005). *The SAGE handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Fullen M. (2002). The change leader. Educational Leadership, 59(8), 16-20.
- Gall, M.D., Gall, J. P. & Borg, W. R. (2006). Educational research: An introduction (8th ed.). Boston: Allyn & Bacon.
- Greene, J. C. (2006). Toward a methodology of mixed methods social inquiry. *Research in the Schools. Special Issue:*New Directions in Mixed Methods Research, 13(1), 93-99.
- Greene, J. C. (2008). Is mixed methods social inquiry a distinctive methodology? *Journal of Mixed Methods**Research*, 2(1), 7-21.
- Hendricks, C. (2006). Improving schools through action research. Boston: Allyn & Bacon
- Hobson, D. (2001). Action and reflection: Narrative and journaling in teacher research. In G.E. Burnaford, J. Fischer, & D. Hobson (Eds.). *Teachers doing research: The power of action through inquiry* (pp. 7-27). Mahwah, NV: Lawrence Erlbaum Associates.
- Johnson, R.B. & Christensen, L. B. (2007). *Educational research: Quantitative, qualitative, and mixed approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Kemmis, S., & McTaggart, R. (2000). Participatory action research. In N.K. Denizin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 567-605). Thousand Oaks, CA: Sage.
- Kline, W. (2008). Developing and submitting credible qualitative manuscripts. *Counselor Education & Supervision*, 47, 210-217.
- Krippendorff, K. (2013). Content analysis: An introduction to its methodology (3rd ed.). Washington, DC: Sage

Publishing.

- Lyne, L.S. (2008). A cross section of educational research: Journal articles for discussion and evaluation (4th ed.) Los Angeles, CA: Pyrczak Publishing
- Maxwell, J. (2010). Using numbers in qualitative research. Qualitative Inquiry, 16(6), 475-482.
- Mertler, C. (2014). Action research (4th ed.). Thousand Oaks, CA: Sage.
- McNiff, J. (2002). *Action research: Principals and practice* (2nd ed.). London: Routledge Falmer.
- Networks: An on-Line journal for teacher research at http://journals.library.wisc.edu/index.php/networks/index
- Patten, M. L. (2008). *Understanding research methods: An overview of the essentials* (7th ed.). Los Angeles, CA: Pyrczak Publishing.
- Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research. *International Journal of Qualitative Studies in Education*, 16(2), 175-196.
- Prendergast, M. (2006). *Seven stages in my first action research project*. Retrieved 9/27/2006. http://educ.queensu.cap/projects/action_research/michael.htm
- Pyrczak, F., & Bruce, R.R. (2003). Writing empirical research reports: A basic guide for students of the social and behavioral sciences (4th ed.). Los Angeles, CA: Pyrczak Publishing.
- Pyrczak, F. (2007). Evaluating research in academic journals: A practical guide to realistic education (4th ed.). Los Angeles, CA: Pyrczak Publications.
- Rossman, G. B., & Rallis S. F. (2003). *Learning in the field: An introduction to Qualitative Research* (2nd ed.). Thousand Oaks, CA: Sage.
- Ruszkiewicz, J. J., Walker, J.R. & Pemberton, M. (2005). *Bookmarks: A guide to research and writing* (3rd ed.). New York:Longman.
- Slavin, R.E. (2006). Educational research in an age of accountability (1st ed.). Boston: Allyn & Bacon.
- Snyder, N. (2004). The plagiarism handbook. Los Angeles, CA: Pyrczak Publishing.
- Stake, R. E. (1995). The Art of Case Study Research. Thousand Oaks: Sage Publications, Inc.
- Zeni, J. (Ed.). (2001). Ethical issues in practitioner research. New York: Teachers College Press.

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)

Effective: Spring 2015