

## OFFICIAL SYLLABUS

DISCIPLINE: EDEF  
COURSE: 606

### A. Catalog Entry

EDEF 606: Educational Research

Three (3) hours lecture.

Involves the study of both qualitative and quantitative research emphasizing the understanding of statistical concepts and procedures necessary to create and implement effective education research. A goal of the course is to present essentials necessary for students to carry out the entire research process from identifying research problems to writing research reports. Students will analyze various approaches to planning research and will discuss techniques and procedures used in making and evaluating studies.

### B. Detailed Description of the Content of Course

This course is designed to improve skills in locating, understanding, and evaluating research and other professional literature. The broad goals of the course are to develop the ability to effectively explain, synthesize, and apply educational research methods, concepts, and strategies that impact knowledge about education. To satisfy the goals of the course, students will:

- Develop new knowledge about teaching, learning, and counseling.
- Develop a thorough knowledge of the scientific method as it relates to educational research.
- Learn the skills necessary to write an education research proposal.
- Write research questions that relate to a given research problem.
- Understand the ethical aspects of educational research.
- Conduct a review of research literature in a selected topic, involving locating, reading, and evaluating reports of research.
- Understand sampling techniques that enable the researcher to select legitimate samples representative of a larger population.
- Become familiar and competent with computer software programs such as *Statistical Package for the Social Sciences* (SPSS) for the purposes of collecting, organizing, and analyzing data.
- Understand descriptive, causal-comparative, correlational, and experimental designs and the appropriate statistical tools that educational researchers commonly use to analyze data.

- Prepare a research proposal to be presented to the instructor and class members.

### **C. Detailed Description of Conduct of Course**

This course is conducted with emphasis on practical application of the subject matter through student participation and discussion, projects and presentations, textbook and journal article readings, and lectures.

### **D. Goals and Objectives of the Course**

Goals, objectives, and assignments in the class address:

- NCATE standard 1d. Student Learning for Teacher Candidates
- Virginia PreK-3 licensure regs VAC 20-542-100.
  1. i. The ability to analyze, evaluate, apply, and conduct quantitative and qualitative research;
  - j. The ability to use technology as a tool for teaching, learning, research, and communication.
- NAEYC national sub-standard 4c. Understanding Content Knowledge in Early Education. Investigating resources in libraries and internet sites, candidates demonstrate self-motivated, purposeful learning that directly influences the quality of their work with young children.
- Council for Exceptional Children (CEC) standard. CC9K4. Methods to remain current regarding research-validated practice.
- International Reading Association (IRA)
  - 1.2 Demonstrate knowledge of reading research and histories of reading.
  - 5.2. Continue to pursue the development of professional knowledge and dispositions.
- VDOE
  - 5.j Demonstrate knowledge of current research and exemplary practices in English/Reading.
- INTERSTATE SCHOOL LEADERS LICENSURE CONSORTIUM STANDARDS (ISLLC) for School Leadership and Administration
 

ISLLC 2 – Using data as a part of ongoing program evaluation to inform and lead change; information sources and processing, including data collection and data analysis strategies; knowledge understanding and application of management and leadership skills that achieve and efficient organizational operations including educational research.

ISLLC 3 – Knowledge, understanding and application of systems and organizations including educational research.

- Virginia Department of Education Standards for Administration and Supervision (VAS)

The candidate will demonstrate knowledge, understanding and application of systems and organizations (VAS b).

Having successfully completed this course, students will:

- Use professional journals and electronic resources, to demonstrate the ability to discriminate between non-research and peer-reviewed professional research articles.
- Provide written analyses of scientific research articles that:
  - identify the major research questions
  - describe the type of research method used
  - identify the major research variables and how each variable was operationally defined
  - summarize the sampling method used
  - summarize the data collection methods used
  - summarize the conclusion
- Design a research study. Students will do everything a researcher would do up to the point of collecting the data. Students will not collect the data, analyze it, or interpret the findings; however, the preparation of the research proposal should demonstrate a good understanding of how educational research is conducted and will better understand what goes into the research process. The final proposal should include:
  - A clear statement of the problem to be studied and the reason for doing the research. The goal here is to make a reader understand the problem and why research is needed.
  - A very specific research question for the problem under investigation
  - A review of previous literature on the topic
  - The methodology used to undertake the study: (i.e., participants, instruments, procedures, data analysis, and limitations.
  - A comprehensive reference page, listing only those sources cited in the research paper.
  - APA style is followed.

### **E. Assessment Measures**

- Provide written analyses of scientific research articles using APA writing style
- Complete other written assignments demonstrating a thorough knowledge of course material using APA writing style (for example: write research questions that relate to a given research problem)

- Collect, organize, and analyze data using a computer software program such as *Statistical Package for the Social Sciences* (SPSS)
- Conduct a review of research literature on a selected topic, involving locating, reading, and evaluating 15-20 reports of research
- Write a complete research proposal using APA writing style
- Present research proposal
- Regular attendance and participation

**F. Other Course Information**