Basic Methods in Educational Research

ERMA 7200

3 credit hours

Course Syllabus – Fall 2025

**Course Number:** ERMA 7300

**Course Name:** Basic Methods in Educational Research

**Credit Hours:** 3 Semester Credit Hours

**Prerequisite:** None

**Professor:** David M. Shannon, Professor Emeritus, Educational Research Methods

# [shanndm@auburn.edu](mailto:shanndm@auburn.edu)

Office Hours: by appointment – email for an appointment

<https://auburn.zoom.us/j/3348443071>

**Office Hours:** Zoom meetings available by appointment

# Course Description and Objectives

The purpose of this course is to provide students with a conceptual understanding of the basic concepts and procedures in educational research. Students will learn to read and evaluate research and plan an empirical study. The emphasis of the course is on the methodology and evaluation of educational research and will require a minimum of computational skills. The fundamental research principles are applicable to other fields of study as well. No prerequisite courses are required. By the end of the semester, students should attain the following learning goals:

1. Increase awareness and understanding of the fundamentals of social science research.
2. Pose research questions about their areas of interest.
3. Determine appropriate design to address research questions
4. Evaluate and critique the research that others have done and apply finding to your research problem and field.

# Texts

# There is NO required textbook for this course. Instead, I will draw from several sources and post resources in Canvas associated with the course topics to save you the expense of purchasing a book that you may or may not use again. Should you want to purchase a text or other resource material, there is a list in the table below.

# Recommended Text:

# Creswell, J. W. and Creswell, J. D. (2023). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*(6th ed.). Thousand Oaks, CA: Sage.

Other Optional Text and Resources

|  |  |
| --- | --- |
| **Text/Resource** | **Purchase/Rental options** |
| American Psychological Association. (2019). *Publication manual of the American Psychological Association (*7th ed.). American Psychological Association. ISBN-13: 978-1433832161; ISBN-10: 143383216X | Amazon ($34.99, spiral bound is easier to use at $37.99). Also available through APA directly online - <https://apastyle.apa.org/products/mastering-apa-style> |
| Creswell, J. W. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*(6th ed.). Thousand Oaks, CA: Sage. | Sage Publishing ($48.45 for eBook, $116 for paperback version). An earlier edition would work if you can find it cheaper.  Student resources - <https://edge.sagepub.com/creswellrd6e/student-resources> |
| Creswell, J. W., & Guetterman, T.C. (2024). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research*(7th Edition). New York: Pearson Education. | Amazon ($89.99 for eBook, $30 for paperback) |
| Fraenkel, J., Wallen, N., & Hyun, H. (2022). *How to Design and Evaluate Research in Education* (11th ed.). New York: McGraw Hill. | Amazon ($69.10), McGraw-Hill ($78 for print copy, $62.57 to rent for 180 days). An earlier version would also work. |
| Mertler, C. A. (2024). Introduction to educational research (4th  ed.). Sage. | Sage Publishing ($85 for Vantage Learning platform, $69.35 to rent for 180 days, $183 paperback and $146 for loose leaf version). An earlier, cheaper edition would also work. |
| Rafig, M. (2024). Research Design Simplified: A Beginner’s Guide to Qualitative, Quantitative, and Mixed Methods Research (Mastering Research: Design, Execution, and Publishing Made Simple). ISBN-13 ‏ : ‎ 978-9198900880 = | Amazon - $9.99 (kindle) or $28.99 (paperback) |
| Online courses/resources – Coursea, edX, Kahns academy, YouTube, MOOCs, etc… | <https://www.research2empower.org/post/learning-research-methods-for-free> |
| Research Methods toolkit - <https://researchmethodstoolkit.com/> | Should be free – might need to create an account |
| Research Methods Knowledge Base - <https://conjointly.com/kb/> | Should be free – might need to create an account |
| OER Commons- Open Educational Resources – Topic = Research Methods - <https://oercommons.org/search?search_source=site&f.search=educational+research+methods> | Should be free – might need to create an account |
| Research Methods In Education (Morrison, Manion, and Cohen, 2018) - <https://archive.org/details/research-methods-in-education/mode/2up> | Should be free – might need to create an account |

# Course Topics and Schedule

This represents a schedule of the assignments and suggested readings for each topic addressed in this course. Assignments are also listed as they pertain to select topics/modules. Due dates for assignments and quizzes will be posted in Canvas.

|  |  |  |
| --- | --- | --- |
| **Topic/Module** | **Suggested Readings** | **Activity/Assignment** |
| Course Overview | Course Syllabus | Review syllabus and Sign Honor Pledge  Respond to Discussion |
| **Introduction to Research** Overview of the Research Process and Design Options | Creswell, Ch. 1, Frankel, Ch. 1-2, Mertler, Ch. 1-2; Rafig, Ch. 1-3, 14 | Individual/Group Assignment  Complete quiz before advancing to next section/module |
| Review of Literature | Creswell, Ch. 2, Frankel, Ch. 4; Mertler, Ch. 5; Rafig, Ch. 5 | Individual/Group Assignment - Lit Review Activity/Map |
| Theoretical and Ethical Considerations | Creswell, Ch. 3, 4, Frankel, Ch. 3; Mertler, Ch. 4 | Individual/Group Assignment |
| Introduction and Problem Statement and Research Questions | Creswell, Ch. 5-7, Frankel, Ch. 5; Mertler, Ch. 3; Rafig, Ch. 4 | Individual/Group Assignment - Statement of the Problem and Initial Research Questions  -Complete quiz before advancing to next section/module |
| Sampling, Data Collection and Analysis | These issues will be addressed as they apply to the types of research designs listed below.  Sampling- Creswell, Ch. 8-10; Frankel, Ch. 6; Rafig, Ch. 7  Data Collection - Creswell, Ch. 8-10; Frankel, Ch. 7-8; Mertler, Ch. 11-13; Rafig, Ch. 8; Rafig, Ch. 11  Analysis and Reporting - APA Publication Manual; Creswell, Ch. 8-10; Frankel, Ch. 10-12, 25; Mertler, Ch. 14; Rafig, Ch. 10, 12 |  |
| **Research Designs** |  |  |
| Quantitative Research | Creswell, Ch. 8; Frankel, Ch. 13-17; Mertler, Ch. 7, 11; Rafig, Ch. 6 | Individual/Group Assignment |
| Qualitative Research | Creswell, Ch. 9; Frankel, Ch. 18-22; Mertler, Ch. 6, 12-13; Rafig, Ch. 6 | Individual/Group Assignment |
| Mixed Designs | Creswell, Ch. 10; Frankel, Ch. 23; Mertler, Ch. 8; Rafig, Ch. 6 | Individual/Group Assignment  Complete Research designs quiz |
| **Reporting Research Findings** | Proposal - Frankel, Ch. 25; Mertler, Ch. 10; Rafig, Ch. 12 | Complete final project - research proposal outline or annotated review of literature. |

# Course Activities and Deliverables

**Grading**

Module Assignments – 50%

Module Quizzes – 25%

Final Project – 25%

## Honor Pledge (adapted from my graduate school days at UVA)

## On my honor as a student, I have neither given nor received aid on course assignments and examinations (quizzes) for which working in groups was not permitted.

## Class Participation and Online Discussion Board

This is an online course, so there are no class meetings to attend. However, it is very important that you keep up with the work this semester. You are encouraged to participate in several discussion threads related to course topics throughout the semester.

## Individual/Group Module Assignments (50%)

## These assignments can be completed individually or as a group. If working in a group, please try to limit the group size to a reasonable number of people (e.g. 3-5). Also, be sure to list all group members on the submitted assignment. Only one group member has to submit each assignment and all group members will earn the same point value. Module assignments build on each other so keeping your group together would be beneficial.

## Quizzes (25%)

There will be 4-5 quizzes during the semester that will be posted and taken in Canvas. The quizzes will be open-book and open-notes; however, these are to be completed individually. Completion of each quiz is required to advance to the next topic in the course. No late quizzes are accepted,. Giving or receiving assistance from anyone on the quizzes will be considered a violation of Auburn’s Academic Misconduct policy and violations will be referred.

**Final Project (25%)**

As with the assignments during the semester, the final project can be completed individually or as a group. There are two primary options for the final project.

1-**Annotated Review of Literature** – this project requires you to find and summarize research articles (a minimum of 10) related to your area of interest. In your summary, describe the research questions/problems they addresses, how they researched these issues and their findings and conclusions. Finally, describe how you would use what you learned from this review and how it can be applied to your profession.

2-**Reseacrh Proposal** – this project is intended for those who plan to become active in research. As an individual or group, you will describe and support all aspects of a proposed research study. These components include research questions, designs, data collection, analysis, reporting and application of findings.

## CITI Training (this is NOT required for the class, but is if you are going to conduct a research study)

The Collaborative Institutional Training Initiative (CITI) offers training in conducting ethically sound research. Most institutions of higher learning, including Auburn University, require individuals to be up- to-date with their CITI training to conduct research. **This is NOT required for this class unless you are planning to conduct a research study.**

1. Register with CITI at [www.citiprogram.org](http://www.citiprogram.org/)
2. Choose to register as a member of an affiliated organization; type in Auburn University.

# Late Assignments Policy

All assignments are due at 11:59pm on the date they are due. Late assignments will receive a deduction of 10% for each day they are late. The only exceptions will be documented emergencies and situations approved with the instructor in advance of the due date. Assignments will not be accepted if they are over one week late; assignments over a week late will receive the grade of a zero.

Open communication is the key. If you have a situation that interferes with your ability to complete an assignment on time, it is your responsibility to contact the instructor as soon as you are aware of this. Life happens, and individual circumstances will be considered on a case-by-case basis.

All work is expected to be typed and submitted through the Canvas course site.The late penalty will be applied to hand-written work and then turned in late in a typed format. All electronic documents submitted for the course are expected to be in Word format.

# Incompletes and Withdrawals

Grades associated with incomplete course work or withdrawal from class will be assigned in strict conformity to University policy (see Auburn University Bulletin). If you wish to drop this course, you may do so by the 15th class day with no grade assignment. From the 15th day of class to mid-quarter a W (withdrawn-passing) grade will be recorded in your transcripts. After this period withdrawal from the course will only be granted under unusual circumstances and must be approved by the Dean of the College of Education.

Note that a new incomplete grade (IN) policy is in effect. The new policy requires that students complete a form requesting an IN grade be assigned. If this form is not completed and given to the instructor of the class, a grade will be assigned with a score of zero (0) for work that has not been completed and turned in by the time the instructor reports grades.

# Academic Misconduct

The Department of Educational Foundations, Leadership, and Technology recognizes university policy regarding academic misconduct. Violations include, but are not limited to: plagiarism, unauthorized assistance during examinations, submitting another’s work product as your own, using another’s words as your own without appropriate citation, sharing unauthorized materials with another that contain questions or answers to examinations, altering or attempting to alter assigned grades. In accordance with University policy regarding academic misconduct, students may be assigned several sanctions upon violations of the Student Academic Honesty Code. See the Student Policy eHandbook for specifics regarding academic misconduct as well as student’s rights and responsibilities associated with the Code.

**Accommodations**

Students who need special accommodations should make an appointment to discuss the Accommodation Memo within the first 2 weeks of class. If you do not have an Accommodation Memo, please contact the Office of Accessibility 1228 Haley Center, (334) 844-2096. <https://fp.auburn.edu/disability/>