Basic Methods in Education Research

ERMA 7200

3 credit hours

Course Syllabus – Fall 2021

**Instructor:** David T. Marshall, Ph.D.

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**Office Hours:** Tuesdays 12:30-2:00pm by appointment

**Research is the open pursuit of knowledge.**

**Our aim is to learn something beyond what *we thought we knew* before we began.**

**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. Understand the fundamentals of social science research.
2. Pose research questions about their areas of interest.
3. Design an empirical study that can answer the questions that are posed.
4. Evaluate and critique the research that others have done.
5. Learn from perspectives that are not your own.

**Texts**

**Required**

There is only one required text for this course. Other readings will be assigned and provided as needed.

McMillan, J.H. (2022). *Educational research: Fundamental principles and methods* (8th ed.). Hoboken, NJ: Pearson.

**Recommended**

American Psychological Association. (2019). *Publication manual of the American Psychological*

*Association (*7th ed.). American Psychological Association.

Okasha, S. (2016). *Philosophy of science: A short introduction* (2nd ed.). Oxford University Press.

## Course Activities and Deliverables

**Class Participation**

This is an asynchronous online course, so there are no class meetings to attend. However, it is very important that you keep up with the work this semester. All assignments are due on Sundays at 11:59pm CDT/CST unless otherwise stated.

**Partners**

Each student will be assigned a partner for the semester. Five discussion assignments involve working with your partner to critique an assigned research article. The research proposal peer reviews described below are also to be completed with your assigned partner. Partner assignments can be found in the Announcements section of Canvas.

**Research Proposal**

Each student will prepare a quantitative research proposal. This will be the primary deliverable for the course. The paper will be completed initially in two parts. The second part should include the first part of the paper.

The first part of the proposal assignment will discuss:

* The identification of a researchable problem
* A review of related research
* The research question(s) and corresponding hypotheses.

The second part of the proposal will discuss:

* The research design and methodology
* The sampling approach
* Measurement issues
* Data collection procedures
* Data analysis plan
* Limitations.

Students will peer review both parts of the paper. The proposal will be turned in as one complete document on November 14. Students will be given an opportunity to revise and resubmit their papers for an improved grade.

There will also be a peer review reflection paper will be required and due the day the proposal is due. Specifications for this can be found in Canvas.

The research proposal is designed to offer students the opportunity to apply what has been learned in the course. Students do not have to carry out the study that they propose for this course; there is not enough time in the space of a semester for this to be a practical requirement. The research proposal must be on a topic that is professionally relevant for each student, and the study that is designed must be feasible to carry out given adequate resources and time.

**Discussion Assignments**

Nine discussion assignments are assigned during the semester. Each of these assignments have two due dates. The first is for initial posts; these will be due each week on a Thursday. Individuals are typically required to post at least two comments for each discussion thread, and comments are always due on a Sunday. This affords everyone the opportunity to read all of the initial posts prior to adding comments.

Some discussion threads are to be completed individually, while others are to be completed with your assigned partner. These are clearly labeled in Canvas in the instructions for each type of discussion assignment. The lowest Discussion grade will be dropped at the end of the semester.

No late Discussion assignments will be considered for a grade. It is important to keep up with the work and it is important to be sure to communicate with the instructor when issues arise, as well as your partner for group assignments.

After each discussion thread, the instructor will include a response to the discussion thread in the weekly video. Students are responsible for the content included in the videos.

**Quizzes**

There will be three 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. Giving or receiving assistance from anyone on quizzes will be considered a violation of Auburn’s Academic Misconduct policy and violations will be referred.

**Assignments**

All assigned work that is not a quiz, discussion assignments, or the research proposal will be considered Assignments that count towards your final grade. The CITI training (described below) is one such assignment. The rest of the assignments for this course will be posted in Canvas with instructions.

**CITI Training**

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. **You should not pay anything to complete this.** For this course, you will be required to:

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.
3. Complete the following course:

**IRB # 2 Social and Behavioral Emphasis - AU Personnel - Basic/Refresher - IRB # 2 Social and Behavioral Emphasis - AU Personnel (ID 72746)**

This can be found under the Human Subjects Courses option. You will be prompted to select another course as well. I would advise you to select the course that most closely mirrors your research interests; however, only the above-listed course is required for this course.

1. Upload your certificate of completion by September 12, 2021.

**Grading Procedure**

The grade for each assignment is criterion-referenced. Overall grades will be determined by the following weights:

Research Proposal 40%

Discussion 20%

Assignments 20%

Quizzes 20%

**Grading Scale**

100 – 90 A

89.99 – 80 B

79.99 – 70 C

69.99 – 60 D

59.99 and below F

Grades are not rounded up at the end of the semester.

**Late Assignments Policy**

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. No work will be accepted that is more than one week late without prior approval from the instructor. And to reiterate, discussion assignments that are submitted late will not receive credit.

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. 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 10th class day with no grade assignment. From the 10th 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.

**Disability Accommodations**

Students who need special accommodations in class, as provided for by the Americans with Disabilities Act, should arrange a confidential meeting with the instructor during office hours in the first week of classes, or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with the Program for Students with Disabilities, 1244 Haley Center, 844-2096.

**Course Schedule**

This represents a schedule of the assignments and activities for the semester. This schedule is subject to change. Assignments and activities may be added to the schedule per the needs of the learning community. The third column represents the readings, assignments, and activities to be completed by the date listed. Chapters referenced without author names are found in the McMillan text.

\* indicates that an assignment is due by the start of class instead of 11:59pm

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| **DATE** | **TOPIC(S)** | **TO BE COMPLETED** |
| August 22 | Course Introduction | * Review syllabus * Complete Honor Code * Post introduction video (in Discussions) * Course Expectations Discussion post |
| August 29 | The Nature of Empirical Research | * Ch. 1 * Villarroel (2016) * Okasha (2016) * NPR podcast * Discussion 1 |
| September 5 | Reviewing the Literature | * Ch. 4, 16 * Discussion 2 * Research topic due |
| September12 | Research Problems and Questions  Ethics in Research | * Ch. 2-3 * Discussion 3 * CITI Training |
| September 19 | Individual Conferences | * Individual Conferences (schedule in Canvas) * Discussion 4 * Literature Matrix |
| September 26 | Sampling | * Ch. 5 * Discussion 5 * Quiz 1 |
| October 3 | Measurement | * Ch. 6 * Rough Draft 1 |
| October 10 | Quantitative Research Designs | * Ch. 8-9 * Peer Review 1 |
| October 17 | Data Collection | * Ch. 7 * Discussion 6 |
| October 24 | Statistics | * Ch. 10 * Statistics Assignment |
| October 31 | Qualitative Research | * Ch. 11-13 * Rough Draft 2 * Discussion 7 * Quiz 2 |
| November 7 | Qualitative Research | * Peer Review 2 * Discussion 8 |
| November 14 | Mixed Methods Research | * Ch. 14 * Discussion 9 * Research Proposal due |
| November 21 | Applied Research Designs | * Ch. 15 * Privitera & Ahlgrim-Delzell chapter |
| November 28 | Applied Research Designs | * Quiz 3 * Qualitative Research Paper |
| December 1 | Course Wrap-Up | * Research proposal revisions due |

**Course Expectations**

Course expectations will be co-constructed through a Discussion assignment due on August 22. Expectations for students, the instructor, and for the community at large will be included below in a revised version of this document. These can be updated as needed throughout the semester.