

UA Educational Research

Information Guide for Graduate Student Success



About Us

The Educational Research program (BER) at the University of Alabama focuses on Research Methodology and prepares scholars to critically engage in educational research and evaluation, develop appropriate and innovative research designs, and contribute conceptually sound analyses to the overlapping fields of education, the social sciences, and the health sciences.

We strongly encourage doctoral students to begin research courses within the first year of their respective programs. This provides ample time for students to complete prerequisite courses that allow them entry into relevant upper-level methods courses. These advanced and specialized courses deepen method and methodological knowledge in order to equip students with the necessary skills and expertise in order to successfully complete their dissertations.

Why Qualitative?

Qualitative research courses engage students in topics and issues related to social research in which the researcher serves as the instrument of data collection. In these courses, students learn the integrated theory/practice of doing qualitative research and discuss topics such as ethics, positionality, methodology, methods, research quality, etc.

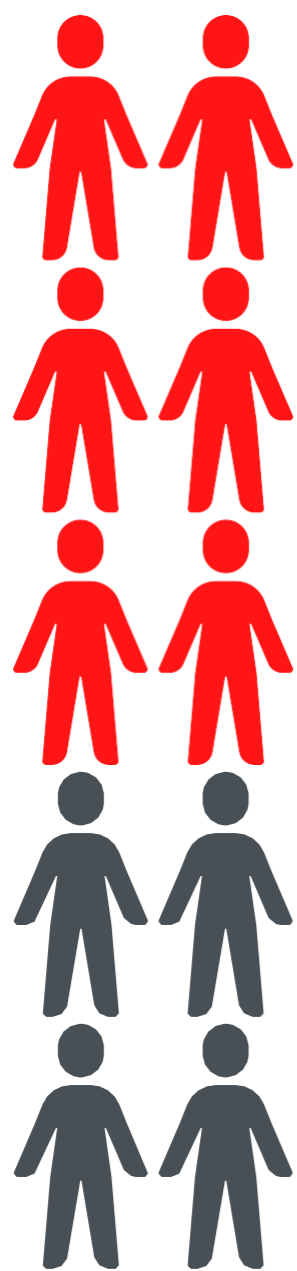
Core courses: BER 631: Qual I, BER 632: Qual II, and BER 633: Qual III. Students who intend to develop a qualitative dissertation are encouraged to take all 3 courses in the sequence.

Why Quantitative?

Quantitative research methods are at the forefront of improving educational practice across the lifespan. Our program offers a variety of courses in statistical methods and measurement/psychometrics. We also offer courses in program evaluation. Students should consult with their advisors about which courses will be most useful to their field of study and future research plans.

Core courses: BER 540: Statistical Methods in Ed; BER 600: Quantitative Research Methods in Ed; BER 640: Quantitative Research II or BER 63 : Applied Regression Analyses; BER 660: Intro to Program Evaluation; BER 657: Intro to Psychometrics (BER 558 for master's students)

Qualitative Research



Students who take BER 631: Qual I + BER 632: Qual II will have foundational qualitative knowledge and will be critical consumers of qualitative work. The third course in the sequence, BER 633: Qual III, is crucial to interrogating overarching issues in conducting qualitative research. These "core" courses serve as an important foundation for undertaking successful qualitative studies.

In addition to this core sequence, we also offer numerous specialized and advanced methodology courses. These include: BER 630: Case Study, BER 634: Narrative Inquiry, BER 635: The Material Turn in Qualitative Inquiry, BER 636: Qualitative Interviewing, BER 637: Arts-Based Research, BER 600: Readings in Qualitative Research, and BER 605: Special Topics (topics vary).

Please note that BER 631: Qual I is a prerequisite for all courses, with the exception of BER 630: Case Study. In addition, BER 633: Qual III is currently only offered during fall semesters.

Qualitative faculty are often asked to serve as methodologists for dissertation committees. PLAN AHEAD! Our faculty require that doctoral students take a minimum of 2 qualitative courses in order to accept committee invitations.

Qualitative Certificate

The Graduate Certificate in Qualitative Research is a 15-credit course sequence that integrates theoretical knowledge with practical application, and field-based experience. Students who complete the certificate will have developed the methodological expertise and background necessary to be recognized as emerging scholars in the field of qualitative inquiry. Though this certificate is housed in the College of Education, students from all disciplines are welcome to apply. Once students are admitted to the program, they are assigned a qualitative faculty advisor to provide support in course planning and otherwise assist them in meeting the requirements for the program.

Prerequisite: BER 631: Qual I

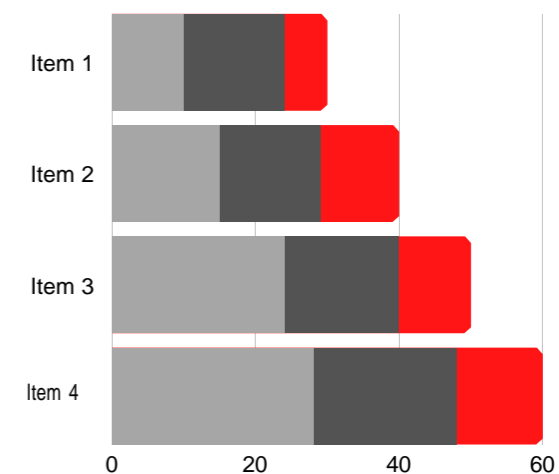
Requirements: BER 632: Qual II, BER 633: Qual III, BER 687: Field Experience, 2 other approved qualitative research courses, and a capstone presentation (typically at the Southeastern Universities Graduate Research Symposium).

Qual
QUESTIONS?

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Quantitative Research

Quantitative course offerings in the Educational Research program cultivate informed users and consumers of research related to statistical and psychometric methods, as well as program evaluation. BER 540 (Statistical Methods in Education) is a prerequisite for most all quantitative courses. After students complete this course, they should choose between BER 640 (Quantitative II) or BER 641 (Applied Regression) as a second prerequisite to prepare them for more advanced quantitative methods courses. Our advanced courses can be broadly classified in four “tracks”: Latent variable modeling; Experimental design or intervention approaches; Measurement and Psychometrics; and Program Evaluation and Policy analysis. Students should plan ahead to ensure that they have taken appropriate coursework to conduct the necessary analyses for their dissertation studies.



Quantitative Certificate

The Graduate Certificate in Quantitative Educational Research places an emphasis on acquiring the skills necessary to both complete statistical calculations and to know how and when to apply and use appropriate calculations. This 15 credit-hour certificate prepares students from various disciplines to conduct research that documents the effects of educational programs and school outcomes. The courses required for this certificate are advanced educational research/statistics courses and provide those completing the certificate with significant and valuable knowledge and skills beyond what is required for typical degree requirements.

Measurement Certificate

The Graduate Certificate in Measurement and Psychometrics emphasizes acquiring the competencies and skills necessary to perform psychometric analyses that reflect best practices in contemporary psychometric research. This 18 credit-hour certificate prepares students from various disciplines to conduct research that links latent variables (i.e., concepts that researchers cannot measure directly) to a wide variety of social, economic, educational, and health outcomes. Advanced research and measurement courses, while grounded in education, will provide students from multiple academic disciplines and helping fields with significant and valuable research knowledge and skills. These skills will provide students with a unique, interdisciplinary tool kit that will enable them to conduct cutting-edge, quantitative research in a wide variety of research context and settings .

Quant
QUESTIONS?

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Quantitative Tracks

Below are the course sequence descriptions and recommendations for four different quantitative tracks. Students are encouraged to plan ahead and start taking courses early in their programs.

Latent Variable Modeling

Latent variable modeling describes a family of statistical methods used to test psychological and social theories involving multiple steps. Typically, researchers estimate a “measurement model” of a latent construct or constructs (e.g. motivation), and a structural model which depicts relationships among the different constructs depicted in a conceptual/theoretical framework.

BER 639: Applied Regression; BER 643: Multivariate or BER 642: Adv. Regression (both pre-reqs for BER 646); BER 646: Structural Equation Modeling; BER 648: Advanced SEM; BER 664: Multi-Level Modeling

Experimental Designs or Intervention Approaches (1)

This track is intended for students who are interested in designing and analyzing experimental/intervention data with small samples. Classes include single subject design, factorial designs, nonparametric, as well as more advanced analyses techniques for nested data.

BER 643: Multivariate; BER 645: Adv. Experimental Design; BER 663: Causal Modeling; BER 664: Multi-Level Modeling; BER 647: Single Case Design

Measurement and Psychometrics (2)

This track provides foundations that will help students develop, evaluate, and interpret the results from measurement instruments such as achievement tests and attitude surveys.

BER 639: Applied Regression; BER 558/657: Introduction to Psychometrics; BER 658 Psychometric Theory; BER 66 : Item Response Theory; BER 670: Rasch & Scaling; BER 671: Cognitive Diagnostic Modeling

Program Evaluation and Policy Analysis

This track track is designed for students who are interested in understanding the impacts of various social and educational programs, practices, and policies on children, families, schools, and communities. Students develop understandings on how to analyze “nested” data sets, as well as how to conduct rigorous program evaluations when there is not a treatment group.

BER 661: Evaluation II; BER 603: Survey Research; BER 639: Applied Regression; BER 663: Causal Modeling; BER 664: Multi-level Modeling; BER 665: Mixed Methods

(1) Students who wish to pursue this track should take BER 640: Quantitative Research II (instead of BER 639) as their second statistics course.

(2) Some faculty members require students to have taken at least one measurement/psychometrics course in order to serve on dissertations in which measurement instruments are used.

For more information about quantitative research, the certificates, and the tracks, visit:
education.ua.edu/programs/ber