

EDUC Courses 2016-17

EDUC 611. Survey of Educational Research Methods. 3 Credits.

DESCRIPTION:

This course provides students with a survey of methods used in educational research, including qualitative, quantitative group, single case, and mixed research methods. The role of systematic approaches to research in education is considered, and an overview of multiple ways of conducting research in education is provided. Emphasis will be placed on developing students' competence in locating, evaluating and using published research to inform decision making in educational, clinical, and social settings. Guidelines for evaluating educational research that uses the various methodologies are provided. Students will evaluate and critique published articles that illustrate each of the different methods, and have the opportunity to apply research to practice in education.

COURSE OBJECTIVES:

Upon completion of this course students will have:

- Developed a critical understanding of the nature, process, development, and warranting of knowledge claims in educational research.
- An increased understanding of the uses, strengths/limitations, bias/fairness, and ethics of evidence used for professional decision making.
- An understanding of methodological approaches to research and their utility for answering specific questions.
- An increased recognition of the complimentary (and non-complimentary) aspects of various research designs and approaches.
- Improved their skills in accessing, evaluating, and using published research evidence in professional decision making.
- Improved their ability to write with research (professional reports, proposals, grants, critical analyses of research reports).

Standard 1: Foundations: Candidates understand the field as an evolving and changing discipline base on philosophies, evidence-based principles and theories, relevant laws and policies, diverse and historical points of view, and human issues that have historically influenced and continue to influence the field of special education and the education and treatment of individuals with exceptional needs both in school and society.

Standard 7: Instructional Planning. Individualized decision-making and instruction is at the center of special education practice.

Standard 9: Professional and Ethical Practice. Candidates are guided by the profession's ethical and professional practice standards.

- Collaborated with peers to apply research methods to practice in special education.

Standard 10: Collaboration: Candidates routinely and effectively collaborate with families, other educators, related service providers, and personnel from community agencies in culturally responsive ways. This collaboration assures that the needs of individuals with exceptional learning needs are addressed throughout schooling.

EDUC 612. Social Science Research Design. 4 Credits.

DESCRIPTION:

Overview of qualitative, quantitative, and single-subject research methods. Emphasis on introducing students to considerations, issues, and techniques of social science research design. This course is designed to help students gain an understanding of and appreciation for the use of research as a tool for professional activities in the real world. Surveys include contemporary qualitative and quantitative research designs, measurement, sampling, and issues related to causation and experimental design. The development of basic research skills and knowledge is the central goal of the course (Ryzin)

Social Science Research Design is designed to provide a conceptual foundation of research design as a first step in preparing students for their thesis or dissertation research. This course is a survey of contemporary qualitative and quantitative research designs, measurement, sampling, and issues related to causation and experimental design. The development of evidence-based inquiry skills is the central goal of this course. By the end of this course, you will be able to identify critical factors affecting the quality and validity of published research. (Shanely)

COURSE OBJECTIVES:

- Uses of research.
- The importance of measurement, sampling, surveys, and other forms of primary data.
- Issues that contribute to the overall quality, validity, and methodological rigor of research.
(Ryzin)

- Learn fundamental research principles.
- Develop an understanding of quantitative research approaches.
- Acquire the ability to critically evaluate published research.
(Shanely)

EDUC 614. Educational Statistics. 4 Credits.

DESCRIPTION:

The purpose of this course is to provide basic knowledge of statistical principles, procedures, and interpretations. The course will offer introductory coverage of descriptive and inferential statistics and require the use of SPSS, a statistics software package. The main emphasis is on practical use of data analysis techniques and interpretations. Course topics include data description, central tendency and variability, statistical inference, and significance tests to compare means and conduct analyses of correlation and regression. (Ryzin)

This is a graduate level statistics course designed primarily for students in the College of Education. Students in other colleges are welcome. The second course in the series, EDUC 640: Applied Statistical Design and Analysis, will be offered in the Spring term. The first course will cover descriptive statistics, logic of hypothesis testing, elementary inferential statistics, confidence intervals, and introduce one-way analysis of variance. The second course will focus on analysis of variance techniques. (Good)

Prereq: [EDUC 612](#).

COURSE OBJECTIVES:

This is an introductory course in statistics, and weighted heavily toward development of competencies in foundations of statistics. Students will learn details of fundamental statistical concepts and acquire data analytic skills. By the end of the course, students should be able to use SPSS to manage data, perform and interpret results of basic statistical procedures. Also, students will be prepared to take more advanced statistics courses that focus on contents, such as analysis of variance and multiple regression models.

EDUC 620. Program Evaluation I. 4 Credits.

DESCRIPTION:

Focuses on small-scale evaluations, particularly in the field of education and human services. The purpose of this course is to provide a doctoral-level seminar on program evaluation. The focus of the course is on evaluations in the field of education, clinical settings, and human services. Conceptual foundations are covered, with an emphasis primarily on information necessary to conduct an evaluation in a real setting. In this term students will plan and design an evaluation. This course is taught in conjunction with a practicum (EDUC 621) offered Spring term in which students can implement the evaluation design developed in Winter term. Students registered for Winter term only will have the opportunity to plan and design an evaluation but will not have the implementation experience provided in the Spring. During the 2nd term content related to developing and completing the evaluation report will be included.

Prereq: [EDUC 640](#).

COURSE OBJECTIVES:

Upon completion of this course students will be able to:

- Identify the differences between evaluation and other forms of inquiry;

- Describe and appropriately apply primary evaluation models including, but not limited to: Objective-oriented, Decision-oriented, Consumer-oriented, Client-centered, Participatory, Naturalistic, and Logic;
- Explain the steps in the process of conducting an evaluation (e.g., defining evaluation questions, developing/selecting evaluation measures, data collection, analysis)
- Develop and write an evaluation agreement between the evaluator and a client for a specific and needed evaluation project;
- Develop a “doable” evaluation design for a specific evaluation project; and
- Apply standards for judging the quality of an evaluation design (meta-evaluation).

EDUC 621. Program Evaluation II. 3-6 Credits.

DESCRIPTION:

The overall purpose of the Program Evaluation Sequence II is the implementation and completion of the evaluation design defined in Program Evaluation I.

Prereq: [EDUC 620](#).

COURSE OBJECTIVES:

- Provide an opportunity for personal coaching and guidance to individual evaluation option teams.
- Engage in dialogue, peer-guided feedback, and solution of problems and concerns during evaluation implementation.
- Provide an opportunity to review data collection, analysis and display procedures appropriate for evaluation.
- Provide an opportunity to deepen an understanding of developing evaluation recommendations from evaluation findings.
- Provide an opportunity to deepen an understanding of developing and presenting evaluation reports, both written and verbal presentations.

EDUC 630. Qualitative Methodology I: Interpretivist Inquiry. 4 Credits.

DESCRIPTION:

Examines the history of qualitative research in the study of human experience, emphasizing interpretive approaches to qualitative research that retain the regulative ideal of objectivity. It focuses primarily on the modern era of social science research, up to the 1980's. It emphasizes interpretive approaches to qualitative research, approaches that retain the regulative ideal of objectivity. The course is organized into three emphasis areas of roughly equal proportion: Theory, Research Design, and Review of the Literature.

COURSE OBJECTIVES:

- Be familiar with a diversity of approaches to what is referred to as “qualitative” social science research. Students will understand the depths of this diversity to include differences in the historical development of methods, differences in underlying conceptions of knowledge and reality, and differences in underlying conceptions of the purpose of research. The course is intended to make the use of the phrase “qualitative research” seem amateurish. Students will understand the need for greater precision in describing their research, including specifying the theoretical framework, unit of analysis, underlying epistemology and ontology, and ideology of their work.
- Understand how a theoretical framework determines the unit of analysis in qualitative research. Become familiar with the major features of and distinctions between three major theoretical frameworks used in interpretive social science research: phenomenology, symbolic interactionism and critical theory. Student will also understand that there are other theoretical frameworks, some associated with particular fields of study.
- Understand the following key conceptual distinctions related to qualitative research: Experimental Inquiry/Naturalistic Inquiry, Verification/Interpretation, Truth/Meaning, Positivism/Post-Positivism, Phenomenology/Anthropology/Sociology, Structuralism/Post-Structuralism.
- Be able to identify and critique the theoretical framework, disciplinary tradition, epistemic and ontological assumptions, and overall research design of published studies.

EDUC 632. Qualitative Methodology II: Postcritical Inquiry. 4 Credits.

DESCRIPTION:

This course examines the ideology and irony of naturalistic approaches to the study of human experience. The first half of the course examines the critical turn in social science methodology, beginning with Marxist ideological critique, and extending through critical theory, critical ethnography, Marxist feminism, and standpoint theory. The second half of the course begins an examination of the post-critical turn in social science methodology including an introduction of two modes of poststructuralist analysis—Foucault’s genealogy and Derrida’s deconstruction—as well as an introduction to contemporary feminist post-structuralism, post-colonialism, queer theory, and the crisis of representation literature in anthropology.

The course explores the epistemic limits of any method of representing human experience, and the political and ethical implications of those limits for researchers. The class is organized around developing an appreciation for the regulative ideal of methodological reflexivity—the idea that research design needs to take into account the inevitable cultural, social, and discursive location of the researcher. Two primary versions of this concept, drawn from critical theory and post-structuralist semiotic theory respectively, are introduced, compared, contrasted, integrated, and ultimately applied to qualitative research design.

Pre- or coreq: [EDUC 630](#).

COURSE OBJECTIVES:

- Develop a critical understanding of research as the cultural production of high status (re)presentations of human experience whose meanings can only be adequately understood in the context of ongoing social, political, and cultural power dynamics.
- Understand the following key concepts related to qualitative research: the differences between reflection on personal bias and reflexive analysis of cultural bias, different kinds of triangulation, the relationship between knowledge claims and the construction of the knowing subject, semiotics, ideology, hegemony, aporia, colonialism, & standpoints as they relate to issues of objectivity vs. advocacy as research ideal.
- Be able to identify the way different approaches to social science writing and argumentation not only contribute to the construction of the object of inquiry, but also generate the knowing subject that comprehends that object.
- Develop a familiarity with specific analytic approaches and research designs including critical ethnography, genealogy, and deconstructive analysis.

EDUC 634. Qualitative Methodology III: Posthumanist Inquiry. 4 Credits.

DESCRIPTION:

Examines theoretical influences on qualitative research beginning with those associated with the linguistic turn, then critiquing the linguistic turn, and ending with the ontological turn. This course examines theoretical influences on qualitative research beginning with the linguistic turn, taking up where Qual II ends. It begins with the influence of continental philosophy associated with the linguistic turn (e.g., Derrida, Foucault, Butler, Spivak) and the epistemological outcomes. It then critiques the limits of the linguistic turn in a movement to the current development of the ontological and/or ethical turn in social science research. This current post-humanist era of social science research will move the course in a trajectory that considers the ontological and material effects of research given this ethical turn. As with Qual I and Qual II, the course is organized into three emphasis areas of roughly equal proportion: Research Design Theory, Review of the Literature, and Practice with Research Techniques with particular emphasis on issues of analysis and representation.

Pre- or coreq: [EDUC 630](#), [EDUC 632](#).

COURSE OBJECTIVES:

- Be familiar with a diversity of approaches to what is referred to as “qualitative” social science research with a particular emphasis on analysis and representation. Students will understand the depths of this diversity to include differences in the historical development of methods, differences in underlying conceptions of knowledge, and reality, and differences in conceptions of the purpose of research. While much attention will be given to research after the linguistic turn, attention will also be paid to the critiques and limits of the linguistic turn, providing a transition to a consideration of the ontological and/or ethical turn in social science research.

- Understand how a theoretical framework produces analytic questions and determines the unit of analysis in qualitative research. Become familiar with research in the traditions contributing what is being named as the new empiricisms; new materialisms; new pragmatist scholarship; indigenous methodologies.
- Understand how a shift from epistemology to ontology effects not only the doing of research, but is fundamental to questions of analysis and representation.
- Understand the following key conceptual distinctions related to qualitative research: Experimental Inquiry/Naturalistic Inquiry, Verification/Interpretation, Truth/Meaning, Phenomenology/Anthropology/Sociology, triangulation/member checking, coding/thick description, and others.
- Be able to identify and critique the theoretical framework, disciplinary tradition, epistemic and ontological assumptions, and overall research design of published studies.

EDUC 636. Advanced Qualitative Methodology: New Materialisms. 4 Credits.

DESCRIPTION:

Examines contemporary theoretical explorations prompted by “the new materialisms” and how questions of ontology and materiality produce considerations of agency, data, subjectivity, voice, and analysis. This course examines the cutting edge of contemporary theoretical explorations prompted by what is often referred to as the new materialisms, new empiricisms, or material feminism in the social sciences. Beginning where Qualitative Methodology III left off, this course will focus on how questions of ontology and materiality produce different considerations of agency, data, subjectivity, voice and analysis.

The course begins with readings in contemporary feminist materialism, philosophy of science, and political theory that provoke the following questions for consideration in the new empiricisms:

- What constitutes data?
- What are the potential sites of agency (both human and nonhuman)?
- How might researchers reconceptualize a materiality of voice?
- How do data function in the new empiricisms?
- What does it mean to consider the materiality of texts?
- What are the ontological productions of research?

As with previous courses in the qualitative methodology sequence, the course is organized into three emphasis areas of roughly equal proportion: Research Design Theory, Review of the Literature, and Practice with Research Techniques with particular emphasis on the practice of writing and representation.

Pre- or coreq: [EDUC 630](#), [EDUC 632](#), [EDUC 634](#)

COURSE OBJECTIVES:

The successful student will:

- Become familiar with new materialist, material feminist, and new empirical literature relevant to some contemporary methodological innovations in social science research design and practice.
- Become familiar with a wide range of contemporary innovations in social science research design and practice.
- Become knowledgeable about one or two particular forms of innovation in social science research design.
- Practice developing and defending innovations in social science research design and practice.

EDUC 640. Applied Statistical Design and Analysis. 4 Credits.

DESCRIPTION:

Factor analysis of variance, planned comparisons, post hoc tests, trend analysis, effect size and strength of association measures, repeated measures designs. This course is a graduate level statistics course targeted primarily for students in the College of Education. This is the second course in a 2-course series. The second course will cover one-way analysis of variance, post hoc comparisons, a priori contrasts, within-subjects and between subjects effects, 2-way and higher order designs, and interactions. The course will take an approach emphasizing the correspondence between multiple regression and analysis of variance using SPSS. (Good)

This course covers analysis of variance (ANOVA) for a range of research designs, including one-way between-subjects, one-way within-subjects, two-way between-subjects, and mixed designs. The course takes an applied approach to design and analysis and therefore does not delve deeply into matrix algebra or estimation methods. Emphasis is placed on proper conduct and interpretation of analyses, including main effects, interactions, and a priori and post hoc contrasts. Applied cases are drawn primarily from the education field. Time permitting it will also briefly introduce connections to analysis of covariance and multiple regression. (Biancarosa)
Prereq: [EDUC 614](#).

COURSE OBJECTIVES:

In this course, students will:

- Learn how to design studies suitable to analysis of variance (ANOVA).
- Gain expertise in conducting ANOVA for a range of designs, including two-way and mixed designs.
- Develop skill in writing SPSS syntax for customized analyses.
- Develop skill in interpreting and drawing inferences from ANOVA results.
- Learn to build and test hypotheses using a priori and post hoc contrasts.
- Gain practice with reporting designs, analyses, results, and interpretations following the APA style guide.

EDUC 642. Multiple Regression in Educational Research. 4 Credits.

DESCRIPTION:

The goal of the course is to learn how to apply and use multiple regression in educational research. Topics covered include a review of bivariate regression and extensive coverage of multiple regression with continuous and categorical independent variables, regression diagnostics, and interactions. Additional topics include orthogonal and non-orthogonal designs, selected post hoc analyses, and logistic regression. Computer analysis using SPSS for Window, conceptual understanding, and application to educational research are stressed.

Prereq: [EDUC 640](#).

COURSE OBJECTIVES:

- Become knowledgeable about multiple regression.
- Learn to conduct and interpret multiple regression analyses.
- Become a critical consumer of approaches to multiple predictor analyses.
- Become acquainted with advanced topics in multiple regression.

EDUC 644. Applied Multivariate Statistics. 4 Credits.

DESCRIPTION:

An advanced inferential statistics course that covers the theoretical rationale for and practical application of multivariate analytic techniques in social science research. The course addresses the conceptual and mathematical foundations of multivariate statistics through a laboratory and project-based curriculum in order to provide for an in-depth examination of the essential elements associated with conducting and interpreting multivariate research.

Prereq: [EDUC 640](#).

COURSE OBJECTIVES:

The primary goal of the course is to familiarize students with the proper application and interpretation of several multivariate statistical techniques. A secondary goal is to refine students' understanding of social science research design. Techniques covered in the course are Multivariate Analysis of Variance (MANOVA) and Covariance (MANCOVA), Descriptive Discriminant Function Analysis (DFA), Principal Components Analysis (PCA), Exploratory Factor Analysis (EFA) and confirmatory Factor Analysis (CFA). For each technique, foundational concepts, computation, statistical assumptions, and the proper application, interpretation, and reporting of analysis results will be covered. By the end of the course, students should be able to demonstrate a conceptual understanding of multivariate statistics, correctly conduct and interpret several multivariate analyses, and produce written reports that demonstrate an understanding of particular research design and data limitations.

EDUC 646. Advanced Research Design. 4 Credits.

DESCRIPTION:

Follows introductory courses in research design and statistics and is intended to provide a deeper understanding of educational research with an emphasis on principles of experimental design and their use in applied research settings. The main topics covered in the course are experimental research design, validity threats and evidence, design sensitivity, and the process of drawing inferences from experimental studies. Although statistical applications will arise in our discussions, they are not the focus of this course. Emphasis in the course is on the mastery of experimental design concepts and principles, development of skills for planning and conducting experimental research in applied settings, and in the development of critical analysis skills in understanding experimental research outcomes.

Prereq: [EDUC 640](#).

COURSE OBJECTIVES:

Students will learn about the role of causation in science, develop an understanding of the threats to causal inference posed by invalid research methodology and design, and acquire the ability to distinguish between experimental designs that on average afford more or less support for establishing causal relationships. Students will also learn how to address the issue of design sensitivity in experimental research. By the end of the course, students should be able to discern between the threats to valid causal inference, identify several different methodological practices for strengthening experimental research design, and recognize which design techniques enhance the sensitivity and statistical power of experimental research.

EDUC 650. Single-Subject Research Methods I. 4 Credits.

DESCRIPTION:

Basic single-subject design strategies and general procedures as well as issues related to conducting and analyzing single-subject research in applied settings. This is the first course in the single subject research methods sequence. It focuses on basic single subject design strategies and general procedures, as well as on issues related to conducting and analyzing single subject research in applied settings. The course covers general methodological information, as well a specific details about single subject designs. Procedures for the collection and visual analysis of data are covered.

Prereq: [EDUC 614](#).

COURSE OBJECTIVES:

- Develop research questions appropriate for single subject research designs.
- Describe the features of basic single subject designs, including withdrawal/reversal (ABAB), multiple baseline, and alternating treatment designs.
- Design and apply single subject research h procedures to address research questions and issues in applied areas of interest.
- Perform visual analysis to identify if a functional relation is documented in data collected with single subject procedures and presented graphically.

- Evaluate and critique single subject research studies for methodological soundness and for whether publication in a professional journal is warranted.
- Describe basic methodological concerns and issues related to the use of single subject designs.

EDUC 652. Single-Subject Research Methods II. 4 Credits.

DESCRIPTION:

Critical evaluation of single-subject and group-analysis research designs; elaboration on critical topics in single-subject methodology. This advanced course in single subject research methods is the second course of a two-course sequence. The course provides an elaboration on topics in single subject methodology presented in the first course in the sequence, and also addresses issues faced by single subject researchers in conducting applied research in typical school, home, and community settings. Students in the class are expected to be in the process of conducting a single subject research study, preparing to conduct a study involving single subject research methods, or interested in making single subject methodology one of their areas of research competence. The course emphasizes practical and logistical considerations and issues in conducting single subject research. Students will be expected to present written and oral critiques of single subject research studies, and to complete activities relevant to conducting and publishing a single subject research study.

Prereq: [EDUC 650](#).

COURSE OBJECTIVES:

- Provide an overview of the conceptual basis of single-subject designs.
- Evaluate and critique single subject research studies for methodological soundness.
- Describe and apply analysis procedures for single-subject data, including inferential statistics when appropriate.
- Articulate advantages and limitations of both single-subject designs and group-statistical designs.
- Complete a human subjects review protocol following guidelines provided by the UO CPHS/IRB.

EDUC 654. Advanced Applied Behavior Analysis. 4 Credits.

DESCRIPTION:

This course is a doctoral level seminar designed to provide skills, practice, and knowledge in advanced theory and methods of ABA. Emphasis will be placed on the theory, principles, procedures, and science of ABA with human and infrahuman populations and systems (e.g., classrooms, schools). Participants will examine best and promising practices for developing and providing positive behavior support (PBS) for individuals who display serious behavioral challenges in a variety of contexts (e.g., schools, hospitals, treatment centers, work, and homes). Analysis and design of advanced research models will be a major focus of this course; therefore, students must have knowledge and experience with research design, especially single subject research design.

Prereq: [EDUC 652](#).

COURSE OBJECTIVES:

- Identify, define, and give examples of principles of human behavior and learning;
- Evaluate the application of applied behavioral methods and principles to practical problems in school and community settings;
- Describe and evaluate the theoretical and applied features of the implementation of comprehensive PBS plans;
- Design, describe and evaluate research that involves ABA principles and procedures;
- Discuss ethical and professional issues surrounding the use of ABA methods.

EDUC 656. Advanced Analysis of Single-Case Research. 3 Credits.

DESCRIPTION:

Focuses on application of statistical and meta-analytic strategies for analyzing single-case research. Sequence with [EDUC 650](#), 652, 654. Offered alternate years.

Prereq: [EDUC 650](#). One course in structural equation modeling or hierarchical linear modeling is recommended preparation.

COURSE OBJECTIVES:

- Define the current analysis approaches recommended for examining single-case research.
- Use one or more emerging computer applications to calculate effect size for single-case studies.
- Define a protocol for including single-case research for identification of evidence-base practices.
- Define a protocol for conducting meta-analyses with single-case research.