**FOUN - Foundations of Education**

**FOUN 611. Introduction to Research Methods in Education. 3 Credits.**
The primary goal of the course is to provide students with the knowledge and skills to access, evaluate, and synthesize empirical research. The course examines types of research questions and associated research designs, components of research reports, sampling, validity of measures, threats to internal and external validity, and simple statistics.

**FOUN 612. Applied Research Methods in Education. 3 Credits.**
Lecture 3 hours, 3 credits. The primary goal of this course is to provide students with the knowledge and skills to write a research proposal and conduct research. It is intended for those students who are completing a thesis to meet their program requirements, those planning on pursuing a doctoral degree, or those who anticipate conducting research for any other reasons. The course examines types of educational research and criteria for selection of topics for research projects; describes criteria for effective collection and organization of data; review of literature, analysis of data and proposal writing.

**FOUN 615. Research and Application of the Evolution of Education: History, Issues, Technology and Assessment. 3 Credits.**
Lecture 3 hours, 3 credits. Course focuses on foundations of U.S. education system; legal aspects for educational delivery in the U.S. and Virginia; use and contributions of technology integration to learning outcomes; formative and summative assessment for improving learning outcomes of urban children and youth.

**FOUN 640. Fundamentals of Measurement and Assessment. 3 Credits.**
Lecture 3 hours, 3 credits. This course stresses the use of measurement and assessment for evaluation and decision making focusing on basic concepts applicable to all types of assessment: statistical concepts, reliability, validity, and interpretive frameworks for cognitive and non-cognitive measures.

**FOUN 641. Assessment and Evaluation of Student Learning. 3 Credits.**
Lecture 3 hours, 3 credits. The valid use of formative and summative assessment and evaluation principles for monitoring and promoting students' learning and development will be addressed. Students will learn how to construct and use a variety of formal and informal teacher assessment procedures.

**FOUN 650. Human Development and Student Learning. 3 Credits.**
Lecture, 3 hours; 3 credits. Corerequisite: Student must be a participant in the Teacher Residency Grant. This course will focus on understanding children's and adolescents' physical, social, emotional, intellectual, and speech/language development; integrating and incorporating children and adolescent differences (economic, social, racial, ethnic, religious, physical, and mental) into understanding developmental issues as they relate to instruction, including the identification and instruction of students with exceptionalities as well as special needs. Research related to the classroom application of these theories is examined and evaluated based on principles of research design and interpretation.

**FOUN 662. Assessment and Evaluation for Schools Serving Military Connected Children and Families. 4 Credits.**
Lecture, 3 hours; Service learning, 1 hour, 4 credits. Prerequisite: COUN 605 and acceptance into the Military Child and Family Education Certificate Program. This course is designed to create educators and educational support service providers capable of assessing the needs of military children and able to self-assess their schools in terms of the comprehensive elements of a military conscious and supportive school. Students will become familiar with the Military Consciousness Assessment Toolkit (Mil-CAT), a comprehensive and dynamic self-assessment tool developed at ODU that provides a process and system for analyzing and prioritizing support structures and needs of military students across the school. Students will also apply basic constructs of assessment in order to develop skills for determining the individual academic, social, and emotional needs of military students and their families, as well as to design ways to assess classroom and school-wide interventions. Use of assessments of individual, group, and school-wide needs to design, implement, and evaluate contextually tailored interventions that support military connected students will be modeled and practices. This course is required for completion of the Military Child and Family Education graduate certificate. Students must be accepted to the certificate program or receive approval from the certificate program director in order to enroll.

**FOUN 722. Introduction to Applied Statistics and Data Analysis. 3 Credits.**
Lecture 3 hours, 3 credits. Introduction to basic topics in statistical analysis, including descriptive statistics and simple inferential statistics such as correlation, regression, t-tests, one-way analysis of variance, and chi-square.

**FOUN 812. Research Design and Analysis. 3 Credits.**
This course focuses on the application of advanced research design as it is applied in various educational disciplines. It provides an in-depth examination of quantitative research approaches, sampling techniques, threats to validity, ethical considerations and reviewing, writing quantitative methodology descriptions for research proposals and reports.

**FOUN 813. Program Evaluation in Education. 3 Credits.**
Examine procedures and problems in the design and utilization of program evaluation in education. Identifies evaluation purposes and the methods of evaluation especially as affected by organizational behavior, ethical considerations, and political influences. Evaluation methodology includes, but is not limited to, design considerations, data utilization, and teacher evaluation. Both quantitative and qualitative strategies will be covered.

**FOUN 814. Qualitative Research Design in Education. 3 Credits.**
This course concentrates on the theoretical underpinnings of qualitative research; methodology and methods incuding identification of ways to collect and analyze qualitative data; examination of ethical issues; development of proposals; and writing up studies.

**FOUN 815. Advanced Qualitative Research. 3 Credits.**
This advanced qualitative course is an introduction to emerging research approaches and alternative data collection methods and analyses in education, counseling and other related disciplines. Content addressed includes visual and audio research, historical movements in qualitative research, critical theory, feminism, queer theory, ethnmethodology, autoethnography, content analysis, and mixed methods research. Prerequisites: Instructor approval required.

**FOUN 816. Single Subject Research Designs. 3 Credits.**
Lecture 3 hours, 3 credits. This course is designed to provide the student knowledge and skills that relate to single subject methodology. It includes an overview of historical and philosophical foundations, basic issues in behavioral assessment, and single subject research and design methodology, including trend and statistical analysis in single subject research. Students will analyze critically empirical research and be able to plan, implement, and evaluate original research.

**FOUN 818. Analysis with Large Datasets. 3 Credits.**
This course concentrates on sample designs, design-based estimation/ inference, data preparation, and analysis of complex survey data in education. Prerequisites: FOUN 822.
FOUN 822. Applied Linear Models in Educational Research. 3 Credits.
Introduction to the general linear model with emphasis on concepts and applications of multiple linear regression (MLR) to problems in educational research. Topics include estimation and interpretation of MLR models, relationships between MLR and analysis of variance (ANOVA), logistic regression analysis, and trend analysis. Prerequisite: FOUN 722.

FOUN 823. Analysis of Variance Applied to Educational Research. 3 Credits.
Lecture 3 hours, 3 credits. Prerequisite: FOUN 722. Introduction of analysis of variance models as applied in education and human services, including two-way and three-way factorial designs, analysis of covariance, repeated-measures, and mixed-model analysis.

FOUN 824. Design and Analysis for Causal Inference in Educational Contexts. 3 Credits.
Introduction to research design and statistical analysis for studies intended to support causal inferences. Topics include experimental, quasi-experimental, and ex post facto design and appropriate models for data analysis. Prerequisites: FOUN 822 and FOUN 823 or permission of instructor.

FOUN 825. Applied Multilevel Modeling in Educational Research. 3 Credits.
This course focuses on advanced applications of statistics that are used in educational research in various educational disciplines. Specifically, the course will offer an introduction to hierarchical linear modeling (HLM) of nested data as applied to education. Topics include conceptual and statistical background of two- and three-level designs, cross-level interaction effects, and application of multilevel models for repeated measures designs. Emphasis is on estimation, interpretation, and diagnostics for multilevel models of continuous outcomes. Prerequisites: FOUN 822 and FOUN 823 or instructor permission.

FOUN 826. Applied Structural Equation Modeling in Educational Research. 3 Credits.
Introduction to structural equation modeling and related multivariate procedures applied to research problems in education. Topics include a brief review of exploratory factor analysis, confirmatory (structural) factor analysis, path analysis, and structural equation modeling with observed and latent variables. Prerequisite: FOUN 822 and FOUN 823 or permission of instructor.

FOUN 827. Applied Logistic Regression. 3 Credits.
A practical and conceptual introduction to applying logistic and probit regression models to typical questions in the social sciences. Will utilize SPSS for practical applications covering simple and multiple regression models, interactions and curvilinear effects, multinomial models, testing of assumptions, and select advanced applications such as propensity score matching and missing data analysis. Prerequisites: FOUN 822 and FOUN 823 or permission of instructor.

FOUN 830. Theories of Learning and Instruction. 3 Credits.
Lecture 3 hours, 3 credits. The course consists of critical discussion and analysis of major learning theories that have influenced learning and instruction in today's schools. Applications of current research to instructional design will be emphasized.

FOUN 831. Human Development in Education. 3 Credits.
This course introduces the domain of human development to education students by promoting their construction of a developmental perspective and adoption of a developmental theory to understand education-relevant phenomena. The course will cover central tenets of the developmental psychological perspective, several contemporary developmental approaches, and contexts of development relevant to educational processes. Furthermore, the course aims to promote students’ skills in pursuing scientific knowledge about educational topics of interest in human development. The course will address life-span processes; however, the primary emphasis will be on processes and ages associated with formal educational settings (K-16). Prerequisite: FOUN 830.

FOUN 835. Motivation in Education. 3 Credits.
The course consists of critical discussion and analysis of major theories of motivation and research supporting these theories. Applications to education and classroom instruction will be emphasized. Equity concerns related to how to motivate students placed at risk will also be examined. Prerequisites: FOUN 830 and FOUN 831.

FOUN 836. Metacognition and Self-regulated Learning. 3 Credits.
The course consists of critical discussion and analysis of major theories and research on metacognition and self-regulated learning. Applications to education and classroom instruction will be emphasized. Strategies to promote self-regulated learning among diverse and at-risk students will also be examined. Prerequisites: FOUN 830 and FOUN 831.

FOUN 840. Educational Measurement and Assessment. 3 Credits.
Overview of advanced educational measurement and assessment ideologies as well as methods. Students will identify, critique, construct and administer educational measures. Psychometric topics such as reliability and validity will be explored as well as advanced assessment issues such as scale construction and item response theory.

FOUN 848. Assessment and Evaluation in Content Areas. 3 Credits.
Lecture 3 hours, 3 credits.

FOUN 850. Sociological and Philosophical Foundations of Education. 3 Credits.
Students examine the relationship between education and society by reviewing a variety of theoretical perspectives and empirical studies. Topics include: social mobility and stratification; social reproduction; the dynamics of race, class, and gender in education; social capital; the student-teacher relationship; teaching as a profession; and higher education.

FOUN 861. Ethnographic Research and Narrative & Historical Research Methods and Design. 3 Credits.
In this advanced qualitative research course, we invite students to focus on ethnographic methods such as ethnography, ethnomethodology, and autoethnography. Students will also learn about participatory research methods. The course will examine narrative and historical research approaches including biography and autobiography. Prerequisites: FOUN 815.

FOUN 862. Critical and Indigenous Research Methods and Design. 3 Credits.
In this advanced qualitative methods course, we invite students to explore readings related to critical and indigenous research, methodologies and paradigms as well as engage in activities to decolonize traditional research approaches with specific groups. In this course we refer to Indigenous peoples as individuals and groups belonging to developing or underdeveloped regions nationally or internationally. Prerequisites: FOUN 815.

FOUN 863. Emerging Qualitative Research Methods. 3 Credits.
This advanced qualitative research course examines emerging and lesser known qualitative research methods such as self-study, portraiture, arts-based research, photovoice, rhizomatic analysis and critical policy analysis. Prerequisites: FOUN 815.

FOUN 864. Case Study, Grounded Theory & Phenomenological Research Methods & Design. 3 Credits.
This advanced qualitative research course examines the intricacies of case study methods. It also delves into the various qualitative research methods surrounding experience and theory formation such as Grounded Theory, Phenomenology, Heuristic Inquiry and Consensual Qualitative Research. Prerequisites: FOUN 815.

FOUN 865. Independent Qualitative Research. 3 Credits.
This capstone course involves the student developing and completing an original qualitative research project independent from the dissertation. Prerequisites: FOUN 815.

FOUN 867. Teaching and Research Practicum. 3 Credits.
Advanced graduate students in the Ph.D. Educational Psychology, Research and Evaluation program or other Ph.D. programs will have the opportunity to participate in research, consulting, an internship, or assisting in teaching research and statistics courses. Prerequisites: FOUN 822 and FOUN 823.
FOUN 869, Teaching Statistics Practicum. 3 Credits.
Advanced graduate students in the Ph.D. Educational Research, Evaluation and Educational Psychology concentration or other Ph.D. concentrations will have the opportunity to participate in research, consulting, internship, or assisting in teaching research methods and statistics courses. Prerequisites: FOUN 822 and FOUN 823.

FOUN 870, Formative Assessment of Student Learning for School Leaders and Curriculum Specialist. 3 Credits.
Lecture 3 hours, 3 credits. Overview of advanced educational measurement and assessment ideologies as well as methods. Students will identify, critique, construct and administer educational measures. Psychometric topics such as reliability and validity will be explored as well as advanced assessment issues such as scale construction and item response theory.

FOUN 881, Dissertation Seminar. 3 Credits.
Instructor approval required. The primary goal of the course is to develop a dissertation proposal. It is intended for doctoral students who have completed all other coursework. The course covers literature reviews, proposal writing, and obtaining approval from Human Subjects committees. Outlets for disseminating the research findings will be explored. Prerequisites: FOUN 812, FOUN 814 and FOUN 822 or FOUN 823.

FOUN 897, Special Topics in Educational Foundations. 3 Credits.
Three hours; 3 credits. Special Topics in Educational Foundations will be used for independent studies with Foundations faculty members.

FOUN 899, Dissertation. 1-12 Credits.
Dissertation credit.

FOUN 999, Doctoral Graduate Credit. 1 Credit.
This course is a pass/fail course doctoral students may take to maintain active status after successfully passing the candidacy examination. All doctoral students are required to be registered for at least one graduate credit hour every semester until their graduation.