FOUN - Foundations of Education

FOUN 101S Learning to Learn (3 Credit Hours)

Learning is essential to human development and is a primary goal of formal schooling. Further, the nature of work is ever changing and the need to adapt to changing environments by learning new skills in new domains is essential for future success. In this educational psychology course, students will focus on the theoretical and empirical study of the science of learning. Students will gain insights into learning processes and achieve a deeper understanding of their own learning, including how to enhance their learning in various contexts.

FOUN 301 Learning and Development (3 Credit Hours)

This course focuses on educational psychology theory and research related to student learning and development. There will be an emphasis on how to incorporate research based principles in designing instruction, motivating students, and promoting a positive classroom climate based on how students learn and develop.

Prerequisites: ENGL 110C

FOUN 302 Assessment of Learning (3 Credit Hours)

This course focuses on exploring and implementing ethical assessment principles in a K-12 setting in order to ensure equity amongst a diverse population of students. Students will discuss and develop assessments for formative and summative purposes. They will analyze and interpret assessment data to measure and promote student success. State assessment programs will be discussed including social justice implications. The purpose of this course is to prepare future educators to analyze instructional situations, identify instructional targets, and determine appropriate assessment tools to monitor and support student learning.

Prerequisites: FOUN 301

FOUN 611 Introduction to Research Methods in Education (3 Credit Hours)

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 educational research and criteria for evaluating empirical studies. It introduces various 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. **Prerequisites:** Students in the graduate Counseling program must take COUN 601 before taking this course

FOUN 612 Applied Research Methods in Education (3 Credit Hours)

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 640 Fundamentals of Measurement and Assessment (3 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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. Student must be a participant in the Teacher Residency Grant.

FOUN 722 Introduction to Applied Statistics and Data Analysis (3 Credit Hours)

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 Credit Hours)

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 Credit Hours)

Examines 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 816 Single Subject Research Designs (3 Credit Hours)

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 817 Mixed Methods Research in Education (3 Credit Hours)

This course will provide an overview of mixed methods research, with an emphasis on its application in education. The course will begin with a discussion of the history and philosophy of mixed methods research, and will maintain a focus on the epistemological underpinnings of both mixed methods designs and their component parts. Consideration will be given to a number of research traditions that can be subsumed under the general headings of 'quantitative' and 'qualitative' methods, including surveys, in-depth qualitative interviewing, ethnography, and social network analysis. Methods for collecting, analyzing, integrating, and reporting data from multiple sources will be discussed. The course will have an applied focus and will include lectures, presentations of applied mixed methods research by guest experts, applied and methodological readings, and student presentations.

Prerequisites: FOUN 812 and TLCI 814

FOUN 818 Analysis with Large Datasets (3 Credit Hours)

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 Credit Hours)

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.

Prerequisites: FOUN 722

FOUN 823 Analysis of Variance Applied to Educational Research (3 Credit Hours)

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.

Prerequisites: FOUN 722

FOUN 824 Design and Analysis for Causal Inference in Educational Contexts (3 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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.

Prerequisites: FOUN 822 and FOUN 823 or permission of instructor

FOUN 827 Applied Logistic Regression (3 Credit Hours)

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 Credit Hours)

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 Credit Hours)

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). **Prerequisites:** FOUN 830

FOUN 835 Motivation in Education (3 Credit Hours)

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.

FOUN 836 Metacognition and Self-Regulated Learning (3 Credit Hours)

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.

FOUN 840 Educational Measurement and Assessment (3 Credit Hours)

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 Credit Hours)

Lecture 3 hours, 3 credits.

FOUN 850 Sociological and Philosophical Foundations of Education (3 Credit Hours)

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 867 Teaching and Research Practicum (3 Credit Hours)

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 Credit Hours)

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 (3 Credit Hours)

Educators in various leadership and instructional roles need strong skills and knowledge in contemporary assessment of student learning. This course addresses a wide range of student assessment topics which makes connections among assessment practices, self-regulated learning, motivation, feedback, and engagement at the classroom and school levels. Students will learn how to develop, build and sustain formative assessment programs.

FOUN 881 Dissertation Seminar (3 Credit Hours)

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 895 Special Topics in Educational Psychology and Program Evaluation (3 Credit Hours)

Study of selected topics in Educational Psychology and/or Program Evaluation.

FOUN 897 Independent Study (1-3 Credit Hours)

This course will be used for independent studies with Educational Psychology and Program Evaluation faculty members.

FOUN 899 Dissertation (1-12 Credit Hours)

Dissertation credit.

FOUN 999 Doctoral Graduate Credit (1 Credit Hour)

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.