**Education (EDUC)**

**Courses**

**EDUC 375 (HMS 375) Community Based Participatory Research Methodology 3-4 Credits**
The course provides an introduction to the core concepts of community based participatory research (CBP) methodology applied to social science research to address public health issues. The course will equip students with strategies for developing community academic partnerships as well as to strengthen skills in research methods.

*Attribute/Distribution: SS*

**EDUC 383 Supervised Research in Applied Psychology 1-3 Credits**
Provides undergraduate junior and senior psychology majors a formal supervised research experience in applied psychology. Students are assigned for the semester to a research team led by a participating faculty member in the counseling psychology or school psychology programs in the College of Education.

*Repeat Status: Course may be repeated.*

**EDUC 388 Statistical Computing 3 Credits**
Use of one or more major statistical software packages. Principles of data coding, editing, integrity checking, and management. Emphasis on link between personal computers, mainframes, and other software.

*Prerequisites: EDUC 408*

**EDUC 391 Educational Linguistics 3 Credits**
Study of language form, language function, and language varieties, among other topics. By collecting and analyzing learner language, students will develop a solid foundation of the system of English, both as it exists and as it is used. Applying this linguistic knowledge to practice, students will learn how to identify learners’ linguistic needs; to set priorities and to establish goals for ELLs; and to embed target language forms in authentic tasks.

**EDUC 394 Special Topics in Education 3 Credits**
Repeat Status: Course may be repeated.

**EDUC 402 Developmental Psychology 3 Credits**
Survey of theories and research concerning perceptual, cognitive, social, and personality development through infancy and childhood. Must have graduate standing.

**EDUC 403 Research 3 Credits**
Basic principles of research; techniques of gathering and analyzing data; design of studies in education. Emphasis on critical reviews of research reports representing various methodologies. Research report required.

**EDUC 405 Qualitative Research Methods 3 Credits**
Foundations of qualitative design as research methodology for answering questions in education. Topics include history, philosophy, types, methods, applications, and critical reading of qualitative research reports. Emphasis on developing key researcher skills of gaining entrance, collecting, analyzing and interpreting data, establishing credibility, and writing and publishing results.

**EDUC 408 Introduction to Statistics 3 Credits**
Organization and description of data. Principles of statistical inference including hypothesis testing, interval estimation, and inferential error control. Emphasis on application.

**EDUC 409 Analysis of Experimental Data 3 Credits**
Emphasis on analysis of variance designs including one-way, factorial, nested, and repeated measures designs. Introduction to multiple regression and the analysis of covariance.

*Prerequisites: EDUC 408*

**EDUC 410 Univariate Statistical Models 3 Credits**
The univariate general linear model. Principles of expressing models and hypotheses about those models. Emphasis on similarity among the analysis of variance, multiple regression, and the analysis of covariance. Examples of nonstandard models and generalization to complex designs.

*Prerequisites: EDUC 409*

**EDUC 411 Multivariate Statistical Models 3 Credits**
The multivariate general linear model. Principles of expressing multivariate models and hypotheses about those models. Emphasis on similarity among the multivariate analysis of variance, multiple regression, and the analysis of covariance. Examples of non-standard models and generalization to complex designs.

*Prerequisites: EDUC 410*

**EDUC 412 Advanced Applications of Psychometric Principles 3 Credits**
Conceptual examination of exploratory and confirmatory factor analysis, cluster analysis, latent-trait modeling, and other advanced psychometric topics.

*Prerequisites: EDUC 409 or SCHP 427 or CPSY 427*

**EDUC 413 Hierarchical Linear Modeling 3 Credits**
This course is designed to introduce students to the theoretical underpinnings and basic applications of hierarchical linear modeling (HLM). At the end of the course, students will understand when HLM is the appropriate analysis of choice as well as be able to analyze multilevel data. Both cross-sectional and longitudinal nestedness will be considered. An understanding of regression analyses is essential for success in this course and is a prerequisite to this class.

*Prerequisites: EDUC 410 or EDUC 411*

**EDUC 414 Structural Equation Modeling 3 Credits**
Analysis and interpretation of a variety of structural equation modeling (SEM) procedures including path analysis, confirmatory factor analysis, factorial invariance, full structural equation models, and latent growth models. Understanding and critiquing both theoretical and applied literature relevant to SEM.

*Prerequisites: EDUC 410 or EDUC 411*

**EDUC 419 Second Language Acquisition 3 Credits**
Introduces theories of second language acquisition (SLA) and explores current research that addresses the psycholinguistic, affective, and sociocultural dimensions of learning a second language (L2), specifically as they relate to English Language Learners (ELLs). SLA theory is fundamental to ESL practitioners' training in teaching and supporting ELLs effectively. Although this course has a theoretical focus, practical understanding of how to apply these theories in teaching will also be emphasized.

**EDUC 420 Contemporary Issues in English Language Learner Education 3 Credits**
Current educational, political, and social conditions that make learning English as a second language a matter of educational equity and social justice. Through a synthesis of the latest research and current educational trends, this course takes a critical look at the complexities of contemporary policies, school practices, and prevalent ideologies that both create and reinforce limited educational opportunities for ELLs.

**EDUC 422 Pedagogy for Second Language Learning 3 Credits**
Introduction to research-based principles and strategies that will promote second language acquisition (SLA) for ELLs. Knowing that schools cannot delay or water down content-learning until ELLs have acquired English, this course emphasizes infusing content and language learning both in and outside the general education classroom.

**EDUC 423 Curriculum and Materials Design for English Language Learners 3 Credits**
Design of curricula and materials to meet the needs of English language learners (ELLs). This course will guide students through the process of creating, adapting, and differentiating materials used in everyday teaching, while also giving students tools to develop curricula for their districts and schools. Students will engage in design and adaptation at many levels from curricula and courses, to assessments, lesson plans, and tasks.
EDUC 424 Practicum in Second Language Teaching 1-3 Credits
Culminating course for students pursuing the ESL Program Specialist Certificate. Throughout the practicum, students will apply the knowledge they have gained about ELL education, theory, and practice to teaching and supporting ELLs in K-12 classrooms. As they teach, students will enhance their professional expertise by evaluating, problematizing and reflecting on their praxis. In doing so, this practicum emphasizes teacher agency and the professional skills needed for self-directed, on-going growth as an ESL practitioner.

EDUC 451 Applied Principles of Cognitive Psychology 3 Credits
Basic principles and contemporary theories of cognitive psychology will be covered, especially regarding the application of these principles to education. Experimental research relevant to contemporary theories of cognitive psychology and the application of these theories in educational settings will be reviewed.

EDUC 461 Single-Subject Research Design 3 Credits
Experimental designs for use with small N's. Topics include design theory and application, experimental validity (internal, external, statistical conclusions and construct validity) and an overview of data analysis procedures.

EDUC 471 (CPSY 471) Diversity and Multicultural Perspectives 3 Credits
Examination of the influence of culture, gender, and disabilities on behavior and attitudes. Historical and current perspectives on race, culture, gender, and minority group issues in education and psychology. Lecture/small group discussion. is restricted to graduate students in the College of Education only.

EDUC 473 Social Basis of Human Behavior 3 Credits
Development of human behavior from a social psychological perspective. Emphasis placed on the impact of society upon school-age children and adolescents.

EDUC 474 Behavioral Neuroscience 3 Credits
Humans are biological creatures, and our behaviors and thoughts are influenced and constrained by our physiology. This course will describe how the function of the working brain contributes to our thoughts, feelings, and actions. We will also discuss the implications of a brain-based approach to issues of free will, responsibility, and identity.

EDUC 475 Clinical Psychopharmacology 3 Credits
This course will examine the principle concepts in pharmacology such as pharmacokinetics and pharmacodynamics, different neurotransmitter systems and our current understanding of their relationship to behavior, as well as pharmacological treatment of various psychological or psychiatric disorders. Additionally, we will explore the ethical issues and concerns associated with taking a bioreductive view of psychology, as well as issues relating to advance in new drug development.

EDUC 482 Practicum in University Teaching: Education 1-4 Credits
Mentored and guided co-teaching focused on the design, organization, pedagogy and assessment of university courses in Education. Students in this course will work with a faculty member to apply best practices in university teaching with feedback while co-teaching students in a course in the College of Education. Students taking the course must meet the college standards for participation and be approved by the program director and department chair. May be repeated for credit. Repeat Status: Course may be repeated.

EDUC 486 Doctoral Qualifying Research Project 1-3 Credits
Design and implement research project under faculty supervision to meet requirements for doctoral programs. Repeat Status: Course may be repeated.

EDUC 490 Thesis 1-6 Credits
EDUC 491 Advanced Seminars: (with subtitle) 1-6 Credits
Intensive study and discussion of a specialized area. Title will vary. Repeat Status: Course may be repeated.

EDUC 493 Internship in: (with subtitle) 1-6 Credits
Opportunity for students to apply theory to practice in a variety of educational settings. Students will be supervised in the field and participate in seminars dedicated to addressing specific concerns and issues encountered during their experience. Consent of program director required.

EDUC 494 Field Work in: (with subtitle) 3 Credits
Identification of significant problems in an educational environment, review of the literature, and development of appropriate research plans.

EDUC 495 Independent Study in: (with subtitle) 1-6 Credits
Individual or small group study in the field of specialization. Approved and supervised by the major adviser. Repeat Status: Course may be repeated.

EDUC 496 Doctoral Research Seminar 3 Credits
For doctoral students. Research design and application to various kinds of educational problems; data collection and analysis. Criticism and evaluation of student proposals. Repeat Status: Course may be repeated.

EDUC 499 Dissertation 1-15 Credits