

**COUNSELING,  
EDUCATIONAL  
PSYCHOLOGY AND  
SPECIAL EDUCATION**

**CEP**

**Department of Counseling,  
Educational Psychology,  
and Special Education  
College of Education**

- 150 Reflections on Learning**  
Fall, Spring, Summer. 3(3-0) Interdepartmental with Teacher Education. Administered by Teacher Education.  
Students' experiences as learners in comparison to psychological, sociological, and anthropological theories and assumptions about learning and teaching in and out of school.
- 201 Current Issues in Education**  
Fall, Spring. 3(3-0) Interdepartmental with Educational Administration and Teacher Education. Administered by Teacher Education.  
Contemporary and perennial issues in elementary, secondary, and higher education.
- 240 Diverse Learners in Multicultural Perspective**  
Fall, Spring, Summer. 3(3-0) R: Open to undergraduate students in the Department of Communicative Sciences and Disorders or in the Kinesiology major or in the Special Education-Learning Disabilities major and open to undergraduate students in the Child Development major.  
Communicative, linguistic, physical, sensory, behavioral, affective, and cognitive differences in learning in multicultural classrooms. Factors that mediate access to knowledge.
- 260 Dynamics of Personal Adjustment**  
Fall, Spring, Summer. 3(3-0)  
Theories and issues in psychological adjustment. Dynamics operating within individuals and in their interactions with others. Implications for learning, development, and well-being.
- 261 Substance Abuse**  
Fall, Spring, Summer. 3(3-0)  
Effects of mood-altering chemicals. Treatment approaches and resources. Special emphasis on adolescent users.
- 301 Literacy Instruction for Students with Mild Impairments (W)**  
Spring. 3(3-1) P: Completion of Tier I Writing Requirement R: Open to juniors or seniors in the Special Education-Learning Disabilities major and open to graduate students in the Special Education major. C: TE 301 concurrently.  
Reading and writing instruction for struggling learners. Characteristics of literacy problems in students with mild impairments. Adaptation for teaching reading and writing.
- 370 Educating Students With Special Needs**  
Fall of even years. 3(3-0)  
Categories of special education. Identification criteria, prevalence, demographics of exceptional children. Interventions and instructional practices. Law, advocacy, and family systems.

- 416 Teaching and Learning With Technology**  
Fall, Spring, Summer. 3(3-0) R: Open to juniors or seniors or graduate students in the College of Education.  
Uses of multimedia technology and social media in teaching and learning. Developing plans for integrating technology in classroom. Designing digital online portfolio as tool for professional development. Teaching school subject matter with technology.
- 449 Behavior Management in Special Education**  
Spring. 3(3-0) SA: CEP 849  
Management practices for behavior problems and disorders. Applied behavior analysis, social skills acquisition through cooperative learning and cooperative discipline. Focus on problem-solving and peer collaboration.
- 451 Models of Special Education Administration and Services**  
Fall. 3(3-1) RB: Admission into the teacher certification program in learning disabilities. R: Open to undergraduate students in the Special Education-Learning Disabilities major.  
Application of theory and research to special education program design and implementation.
- 452 Universal Design for Learning in the General Education Classroom**  
Fall. 3(1-2) R: Open to students in the Special Education-Learning Disabilities major.  
Educating students with disabilities in the general education classroom through principles of Universal Design for Learning and assistive technology.
- 460 Communication Skill Training for the Helping Professional**  
Fall, Spring. 3(3-0) R: Not open to freshmen or sophomores.  
Interpersonal communication focusing on dynamics of listening process, interpersonal style, and barriers to communication. Emphasis on the mastery of microskills.
- 470 Disability in a Diverse Society**  
Fall, Spring, Summer. 3(3-0) R: Open to juniors or seniors or graduate students.  
Needs and life experiences of persons with various physical and mental disabilities, types of services designed to meet these needs, multicultural issues relevant to disabilities, and career opportunities available in the field.
- 490 Independent Study in Counseling, Educational Psychology, and Special Education**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
Supervised individual or small group study of the practice of counseling, educational psychology, or special education.
- 491 Special Topics in Educational Psychology**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Not open to freshmen or sophomores.  
Current issues in educational psychology and child and adolescent development in educational settings.

- 502A Internship in Teaching Diverse Learners II: Learning Disabilities**  
Spring. 6(2-24) RB: (CEP 801A and CEP 802A and TE 501) R: Open only to students in the Special Education-Learning Disabilities major or to master's students in the Special Education major. Not open to students with credit in or CEP 502C or CEP 893F. C: CEP 803C concurrently and CEP 804C concurrently.  
Internship in heterogeneous classrooms. Increased emphasis on independent teaching. Teaching students with learning disabilities in classroom communities that ensure equitable access to important knowledge and skills. Assessing academic and social outcomes.
- 800 Psychology of Learning in School and Other Settings**  
Fall, Spring, Summer. 3(3-0)  
Learning as active, socially-mediated construction of knowledge in school, home, community, and work settings. What is learned, how it is taught and learned, and what learners bring to the setting.
- 801 Psychological Development: Learner Differences and Commonalities**  
Fall, Spring, Summer. 3(3-0)  
Development of differences and commonalities in learners across the lifespan. Contextual influences on development. Implications for learning in schools and other settings.
- 801A Collaboration and Consultation in Special Education**  
Spring. 3(2-3) RB: TE 401 or CEP 840 R: Open to students in the Special Education-Learning Disabilities major and open to graduate students in the Special Education major and open to graduate students in the Education major. C: CEP 804A concurrently and CEP 502A concurrently.  
Professional and ethical responsibilities. Models and methods of collaboration with teachers, parents, and community agencies to foster learning for students with disabilities. Advocacy for students with disabilities in school and community settings.
- 802 Developing Positive Attitudes toward Learning**  
Fall. 3(3-0) RB: CEP 800  
Behavioral, individual-difference, and cognitive perspectives on student motivation to learn.
- 802A Reflection and Inquiry in Teaching Special Education I: Mild Impairment**  
Fall. 3(2-3) RB: (CEP 301) and Admission to the teacher certification program in learning disabilities. R: Open to master's students or educational specialists or doctoral students in the School Psychology major or in the Special Education major. C: TE 501 concurrently.  
Qualitative and quantitative research methods on teaching and learning of students with emotional or learning impairments. Framing educational problems in special education. Designing and assessing studies of mathematics and problem-solving.

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- 803A Assessment of Students with Mild Disabilities**  
Fall, 3(2-3) RB: Admission into the Special Education program R: Open to students in the Special Education-Learning Disabilities major and open to graduate students in the Special Education major and open to students in the Educational Specialist in School Psychology major.  
Informal and formal assessment methods for planning and evaluating instruction and for classifying and placing students with mild disabilities. Engaging with families to improve responsiveness to the assessment.
- 804A Literacy Instruction for Students with Mild Disabilities**  
Fall, Spring, 3(2-3) RB: (CEP 840) and Admission into the Special Education program. R: Open to students in the Special Education-Learning Disabilities major and open to master's students in the Special Education major and open to graduate students in the Education major.  
Methods for teaching literacy to students with mild disabilities. Collecting, analyzing, and interpreting data related to the teaching and programming of literacy instruction.
- 805 Learning Mathematics with Technology**  
Spring, 3(3-0)  
Current technologies for teaching and learning mathematics with understanding. Technology for multiple representations of mathematical ideas, modeling, and authentic learning environments. Psychological and mathematical perspectives on learning mathematics.
- 806 Learning Science with Technology**  
Fall, 3(3-0)  
Possibilities, ideas, and issues associated with teaching science with technology. How K-12 teachers use Internet resources (e.g. simulations, databases, communities) to facilitate science learning. Contemporary conceptual perspectives from educational psychology on important issues of learning.
- 807 Capstone in Educational Technology**  
Fall, Spring, Summer, 3(3-0) R: Open to master's students in the Educational Technology major or approval of department.  
Culmination of the Master of Arts in Educational Technology degree experience. Assessment and synthesis of educational technology knowledge and skill development.
- 810 Teaching for Understanding with Technology**  
Fall, Spring, Summer, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
Application and integration of productivity tools and web-based resources in educational settings to improve teaching and learning.
- 811 Adapting Innovative Technologies to Education**  
Fall, Spring, Summer, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
Application of instructional principles and methods to educational problems in the K-12 classroom. Development of technological applications which are interactive, multisensory, and innovative.
- 812 Applying Educational Technology to Issues of Practice**  
Fall, Spring, Summer, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
Applications of technology in K-12 settings. Identification, implementation, and evaluation of technology-based solutions to educational issues in school settings.
- 813 Electronic Assessment for Teaching and Learning**  
Fall, 3(3-0)  
Foundational theories of assessment. Critical examination of methods (e.g., portfolios, rubrics, surveys, tests, self-evaluations), and digital tools that allow educators to gather information, analyze it, and make informed pedagogical choices. Design of assessments for learning, as learning and of learning, especially in digital contexts.
- 815 Technology and Leadership**  
Fall, Spring, Summer, 3(3-0) RB: CEP 810 and CEP 811 and CEP 812  
Professional development strategies. Project management, planning and evaluation. Relationship building. Ethical and social implications of technology integration.
- 816 Technology, Teaching and Learning Across the Curriculum**  
Fall, 3(3-0)  
Uses of technologies in teaching subject matter. Disciplinary perspectives on teaching and learning with technology.
- 817 Learning Technology through Design**  
Spring, Summer, 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.  
Design of educational tools and software. Designing for learners. Human computer interaction. Art and aesthetics of design. Iterative design. Collaboration in design.
- 818 Creativity in Teaching and Learning**  
Fall, Summer, 3(3-0)  
Value and relevance of creativity in education. Recognizing, analyzing, and supporting creativity in multiple contexts. Psychological, motivational, and organizational aspects of creativity.
- 820 Teaching Students Online**  
Fall, Spring, Summer, 3(3-0) RB: CEP 810 and CEP 811 and CEP 812  
Strategies for constructing and implementing online curricula aimed at students across the lifespan.
- 822 Approaches to Educational Research**  
Fall, Summer, 3(3-0)  
Alternative methods of educational research. Identifying researchable problems in education and developing a research proposal. Applications of descriptive and inferential statistics for analyzing and critiquing published studies.
- 832 Educating Students with Challenging Behavior**  
Spring, 3(3-0) RB: Teaching certificate R: Open only to graduate students in the College of Education.  
Evidence-based classroom interventions for students with disruptive and other behavior problems within general education. Effective teaching approaches for students with challenging behavior.
- 840 Policies, Practices, and Perspectives in Special Education**  
Summer, 3(3-0) R: Open to graduate students in the Special Education major and open to graduate students in the Education major.  
Characteristics of students with disabilities and special needs. Implications for legal and professional responsibilities of teachers. Impact of federal and state policies on special education practices. Multicultural issues in special education.
- 841 Classroom and Behavior Management in the Inclusive Classroom**  
Summer, 3(3-0)  
Identification of behavioral, social and academic characteristics of children with special needs. Principles and techniques for classroom and behavioral management in the inclusive classroom: designing school-wide, classroom-based and individual interventions.
- 842 Content-Area Instruction for Students with Mild Disabilities**  
Spring, 3(3-0) P: CEP 840 R: Open to graduate students in the Special Education major and open to master's students in the Education major.  
Principles for teaching mathematics, science, and social studies in inclusive classrooms that support learning for all students. Instructional practices for providing differentiated instruction and making adaptations and accommodations in these content areas.
- 843 Autism Spectrum Disorders: Characteristics and Educational Implications**  
Fall, 3(3-0) R: Open to graduate students in the Special Education major and open to master's students in the Education major.  
Characteristics of Autism Spectrum Disorders (ASD). History; etiology; past and present theories of autism spectrum disorders. Prevalence, comorbid conditions, research on ASD. Impact of ASD on learning, family systems, and communities.
- 844 Applied Behavior Analysis for Teachers**  
Fall, 3(3-0) R: Open to graduate students in the Department of Counseling, Educational Psychology, and Special Education and open to lifelong graduate students in the College of Education.  
Concepts, principles, techniques, strategies, interventions, applications and research within the field of Applied Behavior Analysis (ABA). History of ABA. Data collection, measurement, design, analysis. Functional analysis. Ethical guidelines.
- 845 Autism Spectrum Disorders: Assessment and Intervention**  
Spring, 3 to 4 credits. P: CEP 844 R: Open to graduate students in the Department of Counseling, Educational Psychology, and Special Education and open to lifelong graduate students in the College of Education.  
Eligibility assessment, ongoing academic and behavioral assessment and corresponding established treatment interventions for students with Autism Spectrum Disorders.

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- 846 Autism Spectrum Disorders: Advanced Topics**  
Spring. 3(3-0) P: CEP 844 R: Open to graduate students in the Special Education major. Theories, technologies, practices and research related to the education of students with Autism Spectrum Disorders. Academic, behavioral, social, and communicative programming for students with Autism Spectrum Disorders. Assistive and augmentative communication. Program evaluation. Creating service systems using ancillary, community, and family personnel.
- 850 Technology and Literacy for Students with Mild Disabilities**  
Summer. 3(3-0) P: CEP 840 R: Open to graduate students in the Special Education major and open to master's students in the Education major.  
Use of technology to improve literacy learning and performance for students with mild disabilities.
- 851 Concepts and Principles in Applied Behavior Analysis**  
Fall. 3(3-0) RB: Undergraduate training in behavior analysis, psychology, special education, or related field. R: Open to master's students in the Department of Counseling, Educational Psychology, and Special Education.  
Fundamental elements, concepts and principles in applied behavior analysis.
- 852 Experimental Analysis of Behavior**  
Fall. 3(3-0) RB: Undergraduate training in behavior analysis, psychology, special education, or related field. R: Open to master's students in the Department of Counseling, Educational Psychology, and Special Education.  
Basic behavioral processes and human and nonhuman learning with a focus on the experimental analysis of behavior.
- 854 Ethics in Behavior Analysis**  
Spring. 3(3-0) P: CEP 844 and CEP 845 R: Open to graduate students in the Department of Counseling, Educational Psychology, and Special Education and open to lifelong graduate students in the College of Education.  
Advanced topics in applied behavior analysis with an emphasis on the Professional and Ethical Compliance Code for Behavior Analysts outlined by the Behavior Analyst Certification Board.
- 855 Verbal Behavior in Education**  
Fall. 3(3-0) P: CEP 844 and CEP 845 and CEP 854 R: Open to graduate students in the Department of Counseling, Educational Psychology, and Special Education.  
Applications of verbal behavior to language and literacy instruction for students with disabilities.
- 861 Counseling Theory, Philosophy, and Ethics**  
Fall. 3(3-0) R: Open only to graduate students in the Counseling major or Rehabilitation Counseling major or School Psychology major.  
Selected counseling theories. Foundations of ethical decision-making. Professional standards, guidelines, and issues concerning the training and work of the counselor and school psychologist. Legal issues and precedents.
- 862 Introduction to Individual and Group Counseling**  
Spring. 3(3-0) R: Open to graduate students in the College of Education and open to graduate students in the School of Social Work and open to graduate students in the Department of Human Development and Family Studies.  
Forming, working with, and ending groups. Building relationships. Handling obstacles. Developing and carrying out agendas in counseling. Simulated individual and group practice.
- 864 Career Counseling**  
Summer. 3(3-0) R: Open to graduate students in the College of Education.  
Career development theories and labor market and occupational information. Assessing and planning aspects of career counseling with various populations.
- 866 Psychoeducational Interventions for Children and Youth**  
Summer. 3(3-0)  
Theoretical and empirical bases for designing, implementing and evaluating intervention programs. Child and youth development. Understanding risk and resiliency. At-risk youth.
- 868 Medical Aspects of Disability**  
Spring. 3(3-0) RB: CEP 861 and CEP 870  
Types of physical disabilities and their implications for vocational rehabilitation. Theories of adjustments to and adaptation to physical disabilities.
- 870 Foundations of Rehabilitation Counseling**  
Fall. 3(3-0) R: Open only to master's students in the Rehabilitation Counseling major.  
History, philosophy, values, legislation, policy and practice of the field of rehabilitative counseling.
- 871 Cognitive and Psychological Aspects of Disability**  
Spring. 3(3-0) RB: CEP 870  
Types of cognitive and emotional disabilities and their implications for vocational rehabilitation. Psychosocial adjustments to chronic disease and disability.
- 872 Social and Environmental Aspects of Rehabilitation**  
Spring. 3(3-0)  
Social and political factors that handicap individuals with disabilities. The Independent Living movement, philosophy, legislation and services. Accommodations and enabling technology. Attitude modification and client empowerment.
- 873 Employment Strategies for Individuals with Disabilities**  
Fall. 3(3-0)  
Public policy, resources, and intervention strategies for assisting persons with disabilities to adapt to the work-place and to achieve vocational outcomes. Assisting employers in accommodating and retaining employees with disabilities.
- 876 Professional Issues in Rehabilitation Counseling**  
Spring. 3(3-0) RB: CEP 870 and (CEP 893A or concurrently) R: Open only to master's students in Rehabilitation Counseling.  
Applications of case management strategies, processes and practices in rehabilitation counseling.
- 877 Assessment in Rehabilitation**  
Fall. 3(3-0) RB: CEP 870 R: Open to master's students.  
Advanced assessment techniques and strategies for rehabilitation settings.
- 879 Teaching College Mathematics**  
Fall of even years. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Mathematics and Mathematics Education and Teacher Education. Administered by Mathematics Education. RB: Past or concurrent mathematics teaching experience. SA: SME 879  
Curriculum materials, case studies, approaches to teaching and student learning of particular mathematics topics.
- 880 Cognitive Assessment**  
Fall. 3(3-0) RB: CEP 821 R: Open only to Ed.S. or Ph.D. students in the School Psychology or Counseling Psychology major.  
Measurement of intelligence. Observation, practice, supervision, interpretation, and report writing in an educational setting.
- 881 Social and Emotional Assessment and Intervention**  
Spring. 3(3-0) RB: CEP 885 R: Open to educational specialists or doctoral students in the School Psychology major.  
Social and emotional assessment and intervention with children and adolescents in school.
- 882 Seminar in Counseling, Educational Psychology and Special Education**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course.  
Seminar in the various fields of emphasis in Counseling, Educational Psychology and Special Education.
- 883 Psychology of Classroom Discipline**  
Summer. 3(3-0) RB: Teaching experience.  
Theories of and strategies for the resolution of classroom discipline problems.
- 884 Roles and Functions of School Psychologists**  
Fall. 3(3-0) R: Open to educational specialists or doctoral students in the School Psychology major.  
Multiple roles of school psychologists from a systems perspective. Historical, legal, ethical, and cultural issues.
- 885 Behavior Disorders in Children**  
Fall, Summer. 3(3-0) RB: 12 graduate credits in Educational Psychology or related area. Not open to students with credit in PSY 853 or PSY 854.  
Characteristics, causes, and treatment of school-related behavior disorders in children within a developmental framework.
- 886 Psychological Assessment and Intervention I**  
Spring. 3(2-3) R: Open to educational specialists or doctoral students in the School Psychology major.  
Psychological and educational assessments and interventions for learning, behavioral, and developmental problems of children and adolescents. Problem-solving assessment model. Informal and formal assessment methods and related educational measurement concepts.

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- 888 Theories of Child Psychotherapy**  
Spring. 3(2-3) P: CEP 885 R: Open only to Ed.S. or Ph.D. students in the School Psychology major.  
Models of psychotherapy for children and adolescents. Empirically-supported, brief models appropriate for school and community-based practice. Critical appraisal of models, methods, and selected techniques.
- 889 Consultation in School Psychology**  
Spring. 3(3-0) P: CEP 880 and CEP 881 and CEP 884 and CEP 886 R: Open to educational specialists or doctoral students in the School Psychology major.  
School-based consultation, theoretical models and consultation skills. Communication and interpersonal skills, conflict management and, joint problem-solving. Ethical issues. Research on consultation.
- 890 Independent Study**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course.  
Individual or group study guided by a faculty member.
- 891 Special Topics in Educational Psychology and Educational Technology**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course.  
Special topics in various areas of study in counseling, educational psychology and special education.
- 893A Rehabilitation Counseling Internship**  
Fall, Spring, Summer. 3 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. RB: CEP 894A R: Open only to master's students in the Rehabilitation Counseling major.  
Supervised internship experience in community rehabilitation settings.
- 893F Special Education Internship: Teaching Children with Learning Disabilities**  
Fall. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: CEP 803A R: Open to graduate students in the Special Education major.  
Supervised student teaching in elementary and secondary education programs for learning disabled students.
- 893J Special Education Internship: Teaching Children with Autism Spectrum Disorders**  
Fall, Summer. 3 to 6 credits. R: Open to graduate students in the Special Education major.  
Supervised internship at the elementary or secondary levels, working with students who are identified as having Autism Spectrum Disorder.
- 893K Practicum in School Psychology**  
Fall, Spring, Summer. 3(3-10) A student may earn a maximum of 12 credits in all enrollments for this course. RB: CEP 883 and CEP 884 and CEP 885 and CEP 886 R: Open to educational specialists or doctoral students in the School Psychology major.  
Clinical experiences in a school setting as well as primary prevention, team decision making, and special education determination.
- 894A Rehabilitation Counseling Practicum**  
Fall, Summer. 6(3-12) RB: CEP 862 R: Open only to master's students in the Rehabilitation Counseling major.  
Supervised practicum in a rehabilitation or human services setting.
- 894D Practicum in Educational Psychology**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. RB: CEP 800 and CEP 801 R: Open only to graduate students in the Learning, Technology and Culture major. C: CEP 884 concurrently.  
Practicum in educational, business, or consulting settings. Possible projects include designing, developing, implementing, or evaluating instructional programs; conducting research; or working with practitioners to incorporate innovative instructional technologies.
- 894F Practicum in Applied Behavior Analysis**  
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. RB: Previous or current coursework in Applied Behavior Analysis. R: Approval of department.  
Supervised practicum in the use of behavior analytic practices, techniques, and strategies with children and/or adults with autism and other disabilities in school, home, or clinic-based settings.
- 894G Special Education Practicum: Children and Youth with Learning Disabilities**  
Fall, Spring. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open only to graduate students in the Special Education major. C: CEP 802A concurrently and CEP 804A concurrently.  
Supervised field experience with students who have learning disabilities. Planning, implementing, and critiquing instruction in elementary and secondary school settings.
- 894J Special Education Practicum: Children and Youth with Autism Spectrum Disorders**  
Fall, Summer. 3 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Special Education major.  
Supervised practicum, at the elementary or secondary levels, working with students who are identified as having Autism Spectrum Disorder.
- 894K Internship in School Psychology**  
Fall, Spring. 3(3-15) A student may earn a maximum of 9 credits in all enrollments for this course. RB: CEP 893K R: Open to graduate students in School Psychology major. Not open to students with credit in CEP 893B.  
Supervised experience in school psychology. Assessment, consultation, and intervention.
- 895 Research Ethics**  
Summer. 1(1-0) Interdepartmental with Educational Administration and Kinesiology and Teacher Education. Administered by Kinesiology. R: Open to graduate students. SA: PES 895  
Identifying and resolving ethical problems in research. Collegial interactions. Authorship, publication, and reviewing practices. Data management. Ownership of data and intellectual property. Conflicts of interest. Protection of human and animal subjects. Lab safety and compliance.
- 899 Master's Thesis Research**  
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 15 credits in all enrollments for this course. R: Open only to master's students in the Department of Counseling, Educational Psychology and Special Education.  
Master's thesis research.
- 900 Proseminar in Educational Psychology and Educational Technology I**  
Fall. 3(3-0) R: Open to doctoral students in the Department of Counseling, Educational Psychology, and Special Education.  
Historical, theoretical, empirical, methodological, and philosophical issues. Research literature on learning, teaching subject matter, and social-cultural contexts.
- 901 Proseminar in Educational Psychology and Educational Technology II**  
Spring. 3(3-0) P: CEP 900 R: Open to doctoral students in the Educational Psychology and Educational Technology Major.  
Further work on historical theoretical, empirical, methodological, and philosophical issues. Scholarship and research skills.
- 902 The Psychology of Learning School Subjects**  
Spring. 3(3-0) R: Open to doctoral students.  
Psychological theories and research regarding learning and teaching of school subjects, including mathematics, science, and reading. Psychological learning contexts in and out of school. Transfer and representation of knowledge.
- 903 Cognitive Development Across the Lifespan**  
Fall. 3(3-0) R: Open to doctoral students.  
Cognitive aspects of human development. Relationship between cognitive development and learning in school and other contexts.
- 904 Social-Emotional Development across the Lifespan**  
Spring. 3(3-0) R: Open to doctoral students.  
Social and emotional aspects of human development. Relationship between social-emotional development and learning in school and other settings.
- 905 Cultural Perspectives on Learning and Development**  
Spring of even years. 3(3-0)  
Theories and research in cultural psychology. Relations among culture, learning, and human development in school and other settings such as family, community, and work. Implications for educational practice.
- 907 Psychological Study of Teaching**  
Spring of odd years. 3(3-0) Interdepartmental with Teacher Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students.  
Research literature on psychological aspects of teachers and teaching. Topics include teacher's decision-making, learning from experience, and developmental changes.
- 909 Cognition and Technology**  
Fall. 3(3-0) R: Open to doctoral students.  
Interaction of computer technologies and cognitive theories. Learning with new technologies; how technology influences theories of mind. How theories of cognition may guide the development of new technologies.

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- 910 Motivation and Learning**  
Spring. 3(3-0) R: Open to doctoral students in the College of Education.  
Enduring questions about motivation and learning. Role of skill versus will in motivation. Higher-order thinking in learning.
- 911 Intellectual History of Educational Psychology**  
Fall. 3(3-0) R: Open to doctoral students.  
Ideas and perspectives on learning and development that have shaped educational psychology. Learning of school subject matters. Learning and development in relation to educational settings.
- 912 Reading Comprehension: Research and Theory**  
Fall of odd years. 3(3-0) Interdepartmental with Teacher Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students.  
Theory and research on the development, teaching, and learning of reading comprehension birth through adulthood.
- 913 Psychology and Pedagogy of Mathematics**  
Fall of odd years. 3(3-0) Interdepartmental with Teacher Education. Administered by Counseling, Educational Psychology and Special Education. RB: CEP 902 R: Open to doctoral students.  
Psychological theory and research on the learning of mathematics. Development of mathematical thinking and knowledge in school and other settings.
- 915 Literacy in Sociocultural Context**  
Fall of even years. 3(3-0) Interdepartmental with Teacher Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students.  
The learning and development of literacy and the role of literacy in mediating cognition, affect, and action in educational contexts. Relationship between literacy and sociocultural contexts.
- 916 Intellectual History of Educational Technology**  
Spring. 3(3-0) R: Open to doctoral students in the College of Education.  
History of technology and learning in formal and informal settings. Historical, theoretical, empirical, methodological, and philosophical issues in the study of technology in education. Teachers' use of educational technology.
- 917 Design of Media for Learning**  
Fall of even years. 3(3-0) R: Open to doctoral students.  
Design knowledge as it intersects education, psychology, communications, engineering, media theory, art and aesthetics. Research methodologies for understanding design. Design of educational media.
- 918 Theories of School-Based Psychological Interventions**  
Spring. 3(2-3) P: CEP 884 R: Open only to Ed.S. or Ph.D. students in the School Psychology major.  
Theories and models of school-based interventions. Theories of organization and purposes of schooling in society. Theories of prevention of psychopathology and promotion of children's competence in school settings.
- 919 Current Research and Issues in School Psychology**  
Fall. 3(3-0) R: Open to educational specialist or doctoral students in the School Psychology Major.  
Rotating topics include role function, diagnosis and eligibility concerns, innovative educational and behavioral interventions.
- 920 Basic Concepts in Educational and Social Science Measurement**  
Fall. 3(3-0) P: CEP 932 RB: Familiarity with a statistical package.  
Development and evaluation of standardized techniques for measuring psychoeducational constructs. Instrument development, validity, reliability, norming, and scaling using both raw score and latent trait measurement models.
- 921 Psychometric Theory I**  
Spring. 3(3-0) P: CEP 920 and CEP 933 RB: Experience using a statistical package.  
Theory-oriented introduction to psychometrics and the measurement of educational and psychological traits. Measurement, scaling, validity, true score test theory, measurement error, reliability, generalizability theory, item response theory, measurement bias, and factor analysis.
- 922 Psychometric Theory II**  
Fall of odd years. 3(3-0) RB: (CEP 921) and one statistics course. R: Open only to Ph.D. students.  
Expansion of generalizability theory, test and item bias, and equating. Measurement of change, profile analysis, scaling approaches, and validity generalization.
- 923 Item Response Theory**  
Fall of even years. 3(3-0) RB: CEP 921 and CEP 933  
Item response theory applied to test construction, scaling, and equating tests and their items.
- 926 Proseminar in Mathematics Education I**  
Fall of odd years. 3(3-0) Interdepartmental with Mathematics Education and Teacher Education. Administered by Mathematics Education. SA: SME 926  
Research on the learning and teaching of mathematics. Focus on curriculum, discourse, equity and teacher education.
- 927 Proseminar in Mathematics Education II**  
Fall of even years. 3(3-0) Interdepartmental with Mathematics Education and Teacher Education. Administered by Mathematics Education. SA: SME 927  
Research on the learning and teaching of mathematics. Focus on teaching, student learning, assessment and policy.
- 930 Educational Inquiry**  
Fall, Spring. 3(3-0)  
Multiple sources of inquiry. Critical assessment of common assumptions about research. Relationship between data and theory. Objectivity, validity, and causal inference across research traditions. Research ethics. Relationship among researcher, researched, and audience. Question formation.
- 931 Introduction to Qualitative Methods in Educational Research**  
Fall, Spring, Summer. 3(3-0) Interdepartmental with Educational Administration and Teacher Education. Administered by Teacher Education. RB: CEP 930  
Concepts and assumptions underlying multiple traditions of qualitative research methods in education. Relationship between research questions and qualitative research design. Epistemology, methods, and ethical issues of ethnography, case study research, grounded theory, oral history and discourse analysis. Criteria for appraising and critiquing qualitative research designs, claims, and evidence.
- 932 Quantitative Methods in Educational Research I**  
Fall, Spring. 3(3-0) RB: (CEP 822 or CEP 930 or KIN 871) or a course in introductory research methods. College algebra. R: Open to graduate students in the College of Education and open to doctoral students in the Mathematics Education major or approval of department.  
Techniques in data collection and data analysis used in educational and psychological research. Graphical and tabular representation of data. Concepts of statistical inference in educational contexts.
- 933 Quantitative Methods in Educational Research II**  
Fall, Spring. 3(3-0) P: CEP 932 RB: College algebra. R: Open to graduate students in the College of Education and open to doctoral students in the Mathematics Education major or approval of department.  
Advanced techniques of data analysis and statistical inference used in educational and psychological research. Multiple regression, analysis of variance, and basic principles of experimental design in educational applications.
- 934 Multivariate Data Analysis I**  
Fall. 4(4-0) RB: CEP 933 R: Open to graduate students.  
Multivariate methods, matrix algebra, and the general linear model as applied to educational research settings.
- 935 Advanced Topics in Multivariate Data Analysis II**  
Spring of odd years. 4(4-0) RB: CEP 934 R: Open to graduate students.  
Application of discrete and continuous multivariate methods in educational research.
- 937 Survey Research Methods in Education**  
Spring of odd years. 3(3-0) RB: CEP 933 R: Open to graduate students.  
Principles and techniques of survey research methodology. Alternative sampling designs. Development of scales and questionnaires. Data analysis procedures. Emphasis on applications in education.
- 938 Latent Variable and Structural Equation Modeling**  
Spring of odd years. 3(3-0) P: CEP 933 R: Open to graduate students.  
Principles and applications of latent variable and structural equation modeling. Testing substantive theories in the social, behavioral, educational, and biomedical sciences. Statistical modeling methodology for examining causality relationships between aspects of studied phenomena. Contributions to construct validation and theory development.

## Counseling, Educational Psychology, and Special Education—CEP

- 939 Seminar in Educational Measurement**  
Spring of odd years. 3(3-0) P: CEP 920 R: Open to graduate students.  
Current issues in educational measurement. Ethics and standards in testing, educational testing policy, school effectiveness indices, and parameters of teacher testing.
- 941 Academic Issues in Special Education for At-Risk Students**  
Fall of even years. 3(3-0) R: Open to doctoral students in the Special Education Major.  
Academic assessment and instructional research in special education. Inquiry in special education related to the design and evaluation of academic programs for learning disabled, mentally retarded, emotionally impaired, and other low achieving students.
- 942 Single-case Experimental Designs for Intervention Research**  
Spring. 3(3-0) P: (CEP 844 and CEP 845 and CEP 854) or (CEP 900 and CEP 930) R: Open to graduate students in the College of Education and open to lifelong graduate students in the College of Education.  
Research methodology course focused on experimental analysis of educational practices and interventions for individual students, classrooms, or schools.
- 943 Multicultural Issues in Special Education**  
Fall of odd years. 3(3-0) R: Open only to doctoral students in the Special Education major.  
Relationships among race, gender, culture, social class, and disability. Individual, group and societal responses to disability. Anthropological, social and psychological theories about origins of cultural diversity.
- 944A Rehabilitation Counselor Pedagogy**  
Fall of odd years. 3(3-0)  
Pedagogical tools and issues associated with teaching and learning in pre-service rehabilitation counseling preparation programs.
- 944B Teaching Practicum in Rehabilitation Counselor Education**  
Fall, Spring, Summer. 3(0-12) R: Open only to Ph.D. students in Rehabilitation Counselor Education.  
Course design and teaching experience under the direct supervision of a faculty member.
- 944C Clinical Practice Practicum in Rehabilitation Counseling**  
Fall, Spring, Summer. 3(0-9) R: Open to doctoral students in the Rehabilitation Counselor Education Major.  
Supervised counseling experience in human services, rehabilitation or educational settings to further develop skills, knowledge, and behaviors appropriate for professional counseling practice.
- 944D Clinical Supervision Practicum in Rehabilitation Counselor Education**  
Fall, Spring, Summer. 3(1-6) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to Ph.D. students in the Rehabilitation Counselor Education major.  
Theory and practice of supervising prospective counselors. Approaches, models, and strategies.
- 949 Critical Issues in Special Education**  
Spring of odd years. 3(3-0) RB: CEP 901A R: Open to doctoral students in the Special Education major.  
Topics in special education, including cognition and sensory impairments, literacy for at-risk students, program design, small sample research, and staff development.
- 952 Technology for Teaching and Learning in Higher Education**  
Spring. 3(3-0) R: Open to doctoral students.  
Technology for support of teaching and learning in higher educational settings. Theories, research, and design of online learning. Electronic portfolios. Libraries in the age of the Internet.
- 953 Teachers and Technology**  
Spring of even years. 3(3-0) R: Open to doctoral students.  
Impact of new technologies on teacher knowledge and practices of teaching. Teachers' use of technology, teacher knowledge, teacher education, and changing roles of teachers.
- 954 Design and Methods in Mathematics Education Research**  
Fall. 3(3-0) Interdepartmental with Mathematics Education and Teacher Education. Administered by Mathematics Education. RB: (MTHE 927) and at least one approved research methods course. SA: SME 954  
History, current trends, and issues pertaining to research design and methods in mathematics education research. Mathematics education research in the areas of policy, teaching, teacher learning, and student learning with particular attention to how research design influence research findings.
- 955 Research Design and Methods for Educational Psychology and Educational Technology**  
Fall. 3(3-0) P: CEP 930 and CEP 932 R: Open to doctoral students.  
Research design and methods for studying learning, development, technology, and culture in educational contexts: classrooms, computer-mediated environments, homes, communities, and workplaces.
- 956 Mind, Media, and Learning**  
Fall of even years. 3(3-0) R: Open to doctoral students.  
Philosophy, psychology, and sociology of new media. Media effects and learning with media. Issues of gender, identity, culture in technologically mediated environments, including Internet, virtual reality, computer games, simulations, artificial intelligence (AI) systems, and pedagogical agents.
- 957 Learning in Complex Domains**  
Spring. 3(3-0) R: Open to doctoral students.  
Problems of learning in complex and ill-structured domains. Real-world knowledge application. Learning difficult subject matter. Situated, collaborative, and case-based approaches to learning in complex domains. Technologies for enabling new kinds of learning.
- 958 History of Literacy Research and Instruction**  
Fall of odd years. 3(3-0) Interdepartmental with Teacher Education. Administered by Teacher Education. R: Open to doctoral students.  
Key historical, political, scholarly, and educational issues influencing literacy curriculum and pedagogy.
- 959 Acquisition and Development of Language and Literacy**  
Spring. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Teacher Education. Administered by Teacher Education. R: Open to doctoral students.  
Language and literacy development with an alternating focus on early and middle childhood and adolescence and adulthood. Major areas of language and literacy development including phonology, orthography, morphology, semantics, syntax, and pragmatics. Connections between oral and written language development. Home and school influences on language and literacy development. Individual differences in language and literacy development.
- 960 Theoretical Foundations of Counseling**  
Fall of even years. 3(3-0) R: Open only to doctoral students in the Rehabilitation Counselor Education major or educational specialists and doctoral students in the School Psychology major.  
Theoretical models of counseling, personality, behavior change, and career development. Research literature on the process and outcomes of counseling. Selected professional issues.
- 961 Advanced Perspectives on Culture, Diversity and Social Justice in Counseling**  
Fall of even years. 3(3-0) R: Open to educational specialists or doctoral students in the Rehabilitation Counselor Education major or in the School Psychology major.  
Culture, gender, disability, and other diversity dynamics as they affect human functioning and counseling practices and multicultural education. Strategies and techniques for multicultural perspectives in counseling and inclusive pedagogy in counselor education.
- 963 Ethics in Counseling and School Psychology**  
Spring. 3(3-0) R: Open only to Ph.D. students in the Rehabilitation Counselor Education or Ed.S. and Ph. D. students in School Psychology.  
Traditional and contemporary issues in theory, research, practice, and training with a focus on ethics including ethical theory, principles, standards, codes of conduct, and legal issues.
- 964 Practice and Profession of Rehabilitation Counseling**  
Spring of even years. 3(3-0) RB: CEP 960 or concurrently R: Open only to Ph.D. students in the Rehabilitation Counselor Education major.  
Foundations and practice of rehabilitation. Pre-service preparation issues. Professional and policy implications.
- 965 Psychosocial Bases of Rehabilitation and Disability**  
Fall of even years. 3(3-0) RB: CEP 964 R: Open to doctoral students in the Rehabilitation Counselor Education major.  
Practice and research issues in rehabilitation counseling.
- 968 Research Methods in Counseling and School Psychology**  
Spring. 3(3-0) RB: CEP 933 R: Open to doctoral students in the Rehabilitation Counselor Education major or in the School Psychology major.  
Research topics and designs in counseling psychology, with emphasis on the development of a viable research proposal.

## CEP—Counseling, Educational Psychology, and Special Education

- 969 Clinical Supervision in Counseling and School Psychology**  
Spring. 3(2-3) RB: CEP 967 and CEP 994B  
Theoretical, empirical, and practical aspects of the supervisory relationship. Process and outcome variables.
- 972 Neurobiological Bases of Learning and Behavior**  
Fall. 3(3-0) RB: Course in child development R: Open to graduate students.  
Development of neural systems related to learning and behavior in children who are typically developing and children who have developmental or acquired disorders. Learning neuroanatomy, brain development, and the typical and non-typical outcomes associated with how children experience academic, social and behavioral outcomes. Influence and interplay among neurodevelopmental, genetic, and environmental factors.
- 973 Child Neuropsychological Assessment**  
Spring. 3(3-0) P: CEP 880 and CEP 972 R: Open to graduate students.  
Best practice in neuropsychological assessment of children, including interviewing, assessment, hypothesis testing and feedback.
- 980 Writing, Research, and Theory**  
Fall of even years. 3(3-0) Interdepartmental with Teacher Education. Administered by Counseling, Educational Psychology and Special Education. R: Open to doctoral students.  
Theory and research on the development, teaching, and learning of writing, birth through adulthood.
- 981 Research on Literacy and Technology**  
Spring of odd years. 3(3-0) R: Open to doctoral students.  
Issues, scholarship, tools, and scholars central to the research on literacy and technology.
- 982 Seminar in Counseling, Educational Psychology and Special Education**  
Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to Ph.D. students in the College of Education.  
Seminars in the various fields of emphasis in counseling, educational psychology, and special education.
- 990 Independent Study**  
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to Ph.D. students.  
Individual or small group study, guided by a faculty member, in the areas of Counseling, Educational Psychology and Special Education.
- 991A Special Topics in Learning, Technology and Culture**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open only to doctoral students in the College of Education.  
Special topics in learning, technology, and culture in education.
- 991B Special Topics in Educational Statistics and Research Design**  
Fall, Spring. 4(4-0) A student may earn a maximum of 16 credits in all enrollments for this course. RB: CEP 933 R: Open only to Ph.D. students.  
Special topics in educational statistics and research design.
- 993K Practicum in PhD School Psychology**  
Fall, Spring. 3(3-7) A student may earn a maximum of 6 credits in all enrollments for this course. P: CEP 893K and CEP 894K R: Open only to Ph.D. students in School Psychology.  
Supervision of practicing graduate students. School psychological service delivery to school-aged populations. Clinical research.
- 994D Laboratory and Field Experience in Special Education**  
Fall, Spring. 3(1-6) R: Open only to Ph.D. students in Special Education. Approval of department.  
Supervised experience working with students with disabilities in K-12 classrooms, for students who need additional experience in teaching environments.
- 994K Internship in PhD School Psychology**  
Fall, Spring. 3(2-20) A student may earn a maximum of 9 credits in all enrollments for this course. P: CEP 993K RB: CEP 893K and CEP 894K R: Open only to Ph.D. students in School Psychology.  
School psychological service delivery to school-aged populations. Experience in professional psychology.
- 995 Practicum in Research Design and Data Analysis**  
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course. RB: CEP 933 R: Open only to doctoral students in the College of Education.  
Supervised research practicum. Design, execution, analysis, presentation, critique, and revision of research projects.
- 999 Doctoral Dissertation Research**  
Fall, Spring, Summer. 1 to 23 credits. A student may earn a maximum of 30 credits in all enrollments for this course. R: Open to doctoral students in the Department of Counseling, Educational Psychology, and Special Education.  
Doctoral dissertation research.