

EDHD - EDUCATION, HUMAN DEVELOPMENT

EDHD400 Introduction to Gerontology (3 Credits)

Multidisciplinary survey of the processes of aging. Physiological changes, cultural forces, and self-processes that bear on quality of life in later years. Field study of programs, institutions for elderly, individual elders, their families and care providers.

EDHD401 Promoting Optimal Aging (3 Credits)

Theoretical, research, and applied issues related to optimal aging from psychological, biological, and societal perspectives. Group or individual projects involving direct field experiences.

Prerequisite: EDHD320; or EDHD400; or permission of EDUC-Human Development and Quantitative Methodology department.

Credit Only Granted for: EDHD401 or EDHD641.

EDHD402 Social Development (3 Credits)

Social Development. Critical concepts and ideas of the study of child and adolescent social development. Focus on changes in interpersonal relationships, emotions, achievement-related behavior and competence, and functioning within the broader social context.

Recommended: EDHD411.

EDHD411 Child Growth and Development (3 Credits)

Theoretical approaches to and empirical studies of physical, psychological and social development from conception to puberty. Implications for home, school and community.

EDHD412 Infant Development (3 Credits)

Infant development across domains, including perceptual, motor, cognitive, language, social and emotional functioning from pre-natal through third year of life.

EDHD413 Adolescent Development (3 Credits)

Adolescent development, including special problems encountered in contemporary culture. Observational component and individual case study.

EDHD414 Development of the Scientific Mind Across the Lifespan (3 Credits)

Study of the educational, cognitive, social, and cultural factors that underlie the development of the scientific mind across the lifespan.

Recommended: EDHD320.

EDHD415 Promoting the Social-Emotional Competence of Young Children in Inclusive Classrooms (3 Credits)

Teachers must have knowledge and skill regarding how to appropriately manage the classroom so that all children, those with and without disabilities, will be able to learn from their school experiences. Classroom management extends beyond responding to student misbehavior to include a comprehensive approach to addressing the social/emotional competence of typically and atypically developing children. The goal of this course is to prepare early childhood teachers who are able to sensitively, responsively, and effectively manage a classroom of young students who are typically developing and those who have disabilities. Includes Field Experience.

Prerequisite: EDHD314 and EDHD425; and (EDHD419 or EDSP420).

Corequisite: EDSP423, EDSP424, and EDHD431.

Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and junior standing or higher; and minimum cumulative GPA of 2.75.

EDHD420 Cognitive Development and Learning (3 Credits)

Current developmental theories of cognitive processes such as language, memory, and intelligence and how differences in cognitive level (infancy through adolescence) mediate learning of educational subject matters.

Prerequisite: EDHD320, EDHD411, PSYC341, or PSYC355; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD421 Peer Relations (3 Credits)

Historical and theoretical underpinnings to contemporary research on peer interactions, relationships, and groups. Focus on (1) inter-dependencies of individual characteristics, social behaviors, social relationships; (2) relations between familial factors and extra-familial peer interactions and relationships; (3) normal and abnormal peer relationships; and (4) cross cultural universals and differences.

Recommended: EDHD411.

EDHD424 Culture, School & Community: Contexts for Learning (PreK-3rd) (3 Credits)

Explores the development of the young child (with and without disabilities, as well as those at environmental risk) in the context of the family and community, with emphasis on the impact of state, federal and school system policy on the child's world. Course will consider issues within the family, and the wider socio-cultural ecology that relate to the child's ability to develop and learn. In addition, students will develop strategies for respectful and culturally responses approaches to actively engage families in their children's development and learning. Includes Field Experience.

Prerequisite: EDHD425 and EDHD314; and (EDHD419 or EDSP420).

Corequisite: EDSP315, EDHD431, EDHD415, and EDSP423.

Restriction: Must be in the Professional Early Childhood/Early Childhood Special Education program; and junior standing or higher; and minimum cumulative GPA of 2.75.

EDHD425 Language Development and Reading Acquisition (3 Credits)

This course focuses on young children's language development and the relationship between language and reading acquisition. Students will learn: concepts central to language development; language achievements at different ages; concepts of emergent literacy; models of reading acquisition and skilled reading.

EDHD426 Cognitive and Motivational Literacy Content (3 Credits)

Students preparing for secondary teaching will learn about the cognitive and motivational aspects of literacy and learning from text for the content areas of literature, science, history and mathematics. Different evidenced-based literacy approaches appropriate for content learning are presented. Characteristics of learning environments that enable students to engage productively with diverse texts, disciplinary tasks, and technological resources in content areas are identified.

EDHD427 Constructing and Integrating the Early Childhood Curriculum (3 Credits)

Explores the world from the child's perspective and constructs curriculum based on cognition, learning, and children's experiences. The integrated curriculum is the overarching framework for this course. Includes field experience.

Prerequisite: EDHD314, EDHD313, EDHD424, and EDSP470.

Corequisite: EDHD323, EDHD322, EDHD315, EDHD321, and EDHD435.

Restriction: Must be in Early Childhood Education program; and senior standing.

EDHD430 Adolescent Violence (3 Credits)

Examines the roots of violence among adolescents and the extent to which this constitutes a problem in various settings. Research studies on its origins, prevention and intervention and implications for social policy are examined.

Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD431 Child Development and Learning, Three to Eight Years (3 Credits)

Provides a basic understanding of child development theory and research, as well as specific knowledge about the development of children during the early and middle childhood "stages," specifically from ages 3 years to 8 years. A major emphasis will be the application of theory and research from the field of educational psychology to an understanding of how young children learn and achieve academically. Because the course will address the developmental and academic functioning of children with and without disabilities, a particular focus will be on individualization.

Prerequisite: Minimum grade of C- in EDHD314 and EDHD425; and 1 course with a minimum grade of C- from (EDHD419, EDSP420).

Corequisite: EDSP423 and EDSP315; and TRACK I: Must be concurrently enrolled in EDSP430, EDSP433; or TRACK 2: Must be concurrently enrolled in EDHD415, EDHD424.

EDHD432 Internship in EC/ECSE (12 Credits)

Interns spend five days per week in the classroom/home-based setting (under the mentorship of a certified teacher) where they gradually assume full responsibility for the planning, delivery and assessment of instruction or an intervention. Track I students will have an Infant/Toddler placement with special educator, Track II students will be in a Pre-K/K or Grade 1,2,3 classroom with general or special educator (must be opposite grade level and mentor from Phase I/fall of the senior year).

Prerequisite: EDHD323, EDHD322, EDSP417, EDHD441, EDHD442, EDHD443, EDHD444, and EDSP321.

Corequisite: EDHD437.

Restriction: Must be in Early Childhood and Early Childhood Special Education program; and senior standing or higher.

EDHD434 Child Development, Birth to Three Years (3 Credits)

Designed to provide students with an understanding of child development theory and research, as well as knowledge about typical and atypical development of children from birth to three years of age. The course emphasizes learning for children with and without disabilities, and for children who are at risk due to poverty and other environmental factors. The course will introduce how children develop and the challenges they face within the domains of physical, cognitive, language, social, and emotional development, with particular attention paid to the impact of risk factors on development. Students will become familiar with delays and differences in development that may occur as the result of disability. Finally, students will learn the effects of cultural and linguistic differences on growth and development. Information about theory and research in child development for children with and without disabilities will be enhanced through a series of observational experiences, which will build upon concepts addressed during class. Includes field experiences.

Prerequisite: EDHD210, EDHD220, and EDSP211.

Corequisite: EDHD314 and EDHD425. Cross-listed with EDSP420.

Credit Only Granted for: EDHD419A, EDSP420 or EDHD434.

Formerly: EDHD419A.

EDHD435 Effective Components of the Early Childhood Classroom (3 Credits)

Explores three topics integral to effective, child-centered early childhood classrooms: assessment, classroom management and parent involvement. Includes field experience.

Prerequisite: EDHD419, EDHD314, EDHD313, EDHD424, and EDSP470.

Corequisite: EDHD323, EDHD322, EDHD315, EDHD321, and EDHD427.

Restriction: Must be in Early Childhood Education program; and senior standing or higher.

EDHD436 Cognition and Motivation in Content Area Literacy for Middle-School Students (3 Credits)

Cognitive and motivational processes of literacy and learning from texts across subjects. Structured approaches to using reading, writing, and speaking for content learning based on approaches to knowledge, motivation, and strategies. Classroom contexts that enable middle-school students to engage with diverse texts and Internet resources are provided

EDHD437 EC/ECSE Teachers as Researchers and Reflective Practitioners (3 Credits)

Students use action research to improve instructional delivery or familial interactions in an effort to enhance the overall educational experiences/outcomes of children in classrooms or home-based contexts. Students will design and implement an action research project in an effort to meet a goal articulated in an applicable Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP) or School Improvement Plan (SIP) as the basis of their project.

Prerequisite: Minimum grade of C- in EDHD322, EDHD323, EDSP321, EDSP417, EDHD441, EDHD442, EDHD443, and EDHD444.

Corequisite: EDHD432.

EDHD440 Adult Development (3 Credits)

Major conceptual approaches to the study of adult development including physical, cognitive, social, emotional and self processes that take place within individuals as they progress from emerging adulthood through middle age.

Prerequisite: EDHD320; or permission of EDUC-Human Development and Quantitative Methodology department.

Recommended: EDHD413.

EDHD441 Data Driven Decision Making in EC/ECSE (1 Credit)

Students will be exposed to formative (e.g., classroom based, ongoing) and summative (e.g., standardized testing) assessments. Students will collect and analyze formative assessment data from their internship classrooms as the bases of planning and delivering instruction to meet the diverse needs of all learners. They will also analyze standardized assessment data to gain an understanding of measures used to determine cross-school and cross-teacher effectiveness. Includes Phase I field experience.

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK I: Must have completed EDSP430 and EDSP433 or TRACK 2: Must have completed EDHD415 and EDHD424.

Corequisite: EDHD322, EDHD323, EDSP321, EDSP417, EDHD442, EDHD443, and EDHD444.

EDHD442 Interventions for Children with Behavioral Challenges (1 Credit)

Students will expand knowledge of and develop skills to address challenging behaviors in inclusive early childhood classrooms. Students examine the causes underlying challenging behaviors during the early childhood years, and identify appropriate resources and support services for working with families to develop a unified approach when responding to behavioral challenges. Includes Phase I field experience.

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK I: Must have completed EDSP430 and EDSP 433; or TRACK 2: Must have completed EDHD415 and EDHD 424.

Corequisite: EDSP321, EDSP417, EDHD322, EDHD323, EDHD441, EDHD443, and EDHD444.

EDHD443 Interventions for Children with Social and Communication Challenges (1 Credit)

Students will learn about the characteristics of children with autism spectrum disorder, pervasive developmental disorder, social communication disorder, and other related challenges and will be equipped to meet the needs of this group of children in the early childhood classroom. The utilization of Universal Design for Learning (UDL), Response to Intervention (RTI) and other early childhood special education approaches, as they apply to this specific group of children, will be addressed. Interventions designed to improve the functioning of children with autism spectrum disorders and related disorders will be reviewed. Includes Phase I field experience.

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and TRACK I: Must have completed EDSP430 and EDSP 433; or TRACK 2: Must have completed EDHD415 and EDHD 424.

Corequisite: EDHD322, EDSP321, EDSP417, EDHD323, EDHD441, EDHD442, and EDHD444.

EDHD444 Action Research in EC/ECSE (1 Credit)

Students will become familiar with the EC/ECSE research process, literature and how teachers use action research to improve pedagogy and the experiences of children in classrooms or home-based contexts. Students will utilize this knowledge, as well as either a goal in an Individualized Education Plan (IEP) or Individualized Family Service Plan (IFSP) or School Improvement Plan (SIP), to develop an action research study commenced during the following semester. Includes Phase I field experience.

Prerequisite: Minimum grade of C- in EDSP423, EDHD431, and EDSP315; and track 1: Must have completed EDSP430 and EDSP433; OR Track 2: Must have completed EDHD415 and EDHD424.

Corequisite: EDHD322, EDHD323, EDHD441, EDHD442, EDHD443, EDSP417, and EDSP321.

EDHD445 Guidance of Young Children (3 Credits)

Practical aspects for helping and working with children, drawing on research, clinical studies, and observation. Implications for day care and other public issues.

Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD460 Educational Psychology (3 Credits)

Application of psychology to learning processes and theories. Individual differences, measurement, motivation, emotions, intelligence, attitudes, problem solving, thinking and communicating in educational settings.

Prerequisite: PSYC100; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD489 Field Experiences in Education (1-4 Credits)

Planned field experience in education-related activities. Credit not to be granted for experiences accrued prior to registration.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Repeatable to: 4 credits.

EDHD498 Special Problems in Education (1-3 Credits)

Available only to students who have definite plans for individual study of approved problems.

Prerequisite: Available only to students who have definite plans for individual study of approved problems.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

EDHD499 Workshops, Clinics, and Institutes (1-6 Credits)

The following types of educational enterprise may be scheduled under this course heading: workshops conducted by the College of Education (or developed cooperatively with other colleges and universities) and not otherwise covered in the present course listing; clinical experiences in pupil-testing centers, reading clinics, speech therapy laboratories, and special education centers; institutes developed around specific topics or problems and intended for designated groups such as school superintendents, principals and supervisors.

Repeatable to: 6 credits.

EDHD600 Introduction to Human Development and Child Study (3 Credits)

An overview of the multidisciplinary, scientific principles which describe human development and behavior and an application of these principles in an analysis of a behavioral record. Techniques of observation, recording, and analysis of human behavior. Emphasis on critiquing and applying research findings.

EDHD601 Biological Bases of Behavior (3 Credits)

Emphasizes that understanding of human life, growth and behavior depends on understanding physical processes. Application throughout is made to brain-behavior relationships and implications for understanding and working with people.

Prerequisite: Must have completed or be concurrently enrolled in EDHD600; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD602 Social Bases of Behavior (3 Credits)

The social forces and expectations that influence behavior from infancy through old age and death. The effects of ethnicity, social learning values, attitudes, historical events and mass media on perception and behavior in societal interactions.

EDHD605 Curriculum in Early Childhood Education (3 Credits)

Curriculum theory, research and practice in educational settings for infants and children to age eight.

EDHD611 Cultural and Contextual Influences on the Young Child (3 Credits)

Theory and research on social and cultural influences in early child development.

EDHD617 Achievement Motivation in Adolescence (3 Credits)

Study of different aspects of motivation and how they develop in the secondary school years. Focus on how different instructional practices influence motivation and design of various strategies for improving students motivation.

Credit Only Granted for: EDHD779W or EDHD617.

Formerly: EDHD779W.

EDHD619 Advanced Scientific Concepts in Human Development (3 Credits)

A critical examination of concepts and issues in contemporary culture as these relate to the development and learning of children and youth.

Repeatable to: 6 credits if content differs.

EDHD624 Cognitive and Motivational Bases of Literacy Instruction in the Content Areas (6 Credits)

Secondary and middle school teachers learn about and apply knowledge and skills related to the cognitive and motivational dimensions of literacy and learning from text for a variety of content areas. Characteristics of learning environments that enable students to engage productively with diverse texts, disciplinary tasks, and technological resources in content areas are identified.

Credit Only Granted for: EDHD624 or EDHD779G.

Formerly: EDHD779G.

EDHD629 Seminar for the Center for Children, Relationships, and Culture (1 Credit)

A seminar and colloquia series featuring speakers from the department, the college, the university, and other universities and institutions from across the world that aims to cover issues pertaining to contemporary theory and research in human development.

Recommended: For graduate students in Human Development.

Repeatable to: 8 credits if content differs.

EDHD635 Adolescents at Risk (3 Credits)

Study of current research on risky behaviors that impact adolescent student learning and achievement particular in underserved populations. General diversity issues and topics specific issues that put adolescents at risk for academic failure and other negative trajectories will be explored.

Recommended: EDHD600.

Credit Only Granted for: EDHD635 or EDHD779L.

Formerly: EDHD779L.

EDHD659 Direct Study of Individuals (3 Credits)

Observational techniques to record the behavior of an individual. Procedures to ensure objectivity in data collection. Methods used to analyze, categorize, quantify observational data in research.

EDHD662 Research Methods in Education Settings (3 Credits)

Research methods associated with studying the development, achievement, and school adjustment of children and adolescents in educational settings, with an emphasis on quantitative methodologies.

EDHD674 Self Processes in Adolescence: Implications for Academic Achievement and School Adjustment (3 Credits)

Study of the development of the self from infancy through adolescence, and examination of the literature on the self processes of special adolescent populations as they relate to achievement-related orientations and school adjustment in secondary settings.

Credit Only Granted for: EDHD619L or EDHD674.

Formerly: EDHD619L.

EDHD690 Theoretical Foundations of Human Development (3 Credits)

Theoretical foundations in the field of human development with a focus on connections between the major theoretical paradigms in the literature and current research in developmental science.

EDHD692 Cognitive Basis of Instruction (3 Credits)

Psychological and educational research literature on human cognition, especially as applied to learning and teaching in classroom settings.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

EDHD700 Infant Development (3 Credits)

An examination of recent research findings in physical, social, emotional and language development during infancy. A review of prenatal and perinatal factors in relation to their influence on later development.

EDHD711 Peer-Culture and Group Processes in Human Development (3 Credits)

The process of group formation, role-taking and status-winning, and the emergence of the peer-culture during childhood and the evolution of the child society at different maturity levels to adulthood. The developmental tasks and adjustment problems associated with winning, belonging, and playing roles in the peer group.

Prerequisite: Permission of EDUC-Human Development and Quantitative Methodology department.

EDHD718 Apprenticeship in College Teaching (1 Credit)

For graduate students teaching autonomously for the first, second, or third term at the University of Maryland, College Park; not intended for teaching assistants. This course provides graduate student teachers with a set of structured experiences that foster professional growth and development in the role of college instructor. Includes seminars on the scholarship of college teaching and principles of optimal college classroom environments, peer and faculty in-class observations of teaching, and guided reflective analysis of experience in the classroom.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

EDHD720 Social Development and Socialization Processes (3 Credits)

This course covers social development and socialization processes across the life-span. The course typically covers the following topics: parent-child relationships, peer relationships, moral development, social cognition, social competence, social motivation, self-regulation, and cultural influences on development. This is core doctoral course.

EDHD721 Cognitive Development and Learning: An Introduction (3 Credits)

Introductory survey into contemporary theory and research in cognitive development; applications to classroom learning.

EDHD722 Learning Theory and the Educative Process (3 Credits)

Advanced study of theories, issues and research in several categories of cognition and learning applied to education and the helping professions.

Prerequisite: EDHD721; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD750 Culture, Context, and Development (3 Credits)

This course will cover theory and research on cultural and contextual influences on social development.

EDHD751 Child Development and Poverty (3 Credits)

This course examines the theoretical, methodological, and empirical literature on the effects of poverty on children's development from a multidisciplinary perspective. It includes basic concepts in methodology, measurement design, and issues related to connecting basic research on poverty and children to policy and program interventions.

Prerequisite: EDHD720; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD760 Advanced Educational Psychology (3 Credits)

Application of psychology to learning processes and theories. Individual differences, measurement, motivation, and intelligence.

Prerequisite: Prior course in educational psychology, learning, or cognition; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD768 Laboratory Methods in Developmental Psychophysiology (3 Credits)

Covers basic electrophysiology and human electrophysiology. Topics include recording, processing, and analyzing EEG and ERP. Emphasis will be placed on the testing of infant and child populations.

Recommended: EDHD775.

Restriction: Permission of instructor.

Repeatable to: 6 credits if content differs.

EDHD775 Human Development and Neuroscience (3 Credits)

Course focuses on the biological bases of human behavior including physiological processes which have an impact on human development.

Prerequisite: EDHD601; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD779 Selected Topics in Human Development (1-6 Credits)

This course focuses on topics of current significance in human development research. Topics covered change each semester, and vary by instructor.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Repeatable to: 6 credits if content differs.

EDHD780 Research Methods in Human Development (3 Credits)

Research methodology for studying human development: research design, hypothesis formulation, instrument development, methodological and statistical approaches, survey of methodologies.

Prerequisite: EDMS651; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD789 Internship in Human Development (3-8 Credits)

Internship experience in one or more human service agencies in the community.

Prerequisite: 9 credits in EDHD courses.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Repeatable to: 9 credits.

EDHD798 Laboratory in Human Development (1-6 Credits)

Independent research supervised by an instructor in a research setting.

Repeatable to: 9 credits if content differs.

EDHD799 Master's Thesis Research (1-6 Credits)

Registration required to the extent of six hours for master's thesis.

EDHD800 Seminar in Early Childhood Education (3 Credits)

This seminar explores relevant current issues in early childhood development and education.

EDHD820 Advanced Topics in Social Development (3 Credits)

Advanced doctoral seminar on socialization and social development with consideration of selected topics. Identification of research problems and areas of application.

Prerequisite: EDHD720; or permission of EDUC-Human Development and Quantitative Methodology department.

Credit Only Granted for: EDHD820 or EDHD821.

Formerly: EDHD821.

EDHD835 The Development of Achievement Motivation (3 Credits)

Development of achievement motivation and how it relates to academic achievement during the elementary and secondary school years. Expectancy-value theory, attribution theory, self-efficacy theory, socialization of achievement motivation.

Prerequisite: EDHD830 or EDHD721; or permission of EDUC-Human Development and Quantitative Methodology department.

EDHD840 Language and Literacy Development (3 Credits)

Content of this course is current theoretical and empirical research on children's language developments and on the linguistic basis of beginning reading.

EDHD842 Learning in Context (3 Credits)

Educational and home context that influence development of motivation, cognitive strategies, and knowledge will be explored.

Prerequisite: EDHD721.

EDHD850 Social Cognition and Moral Reasoning (3 Credits)

Theory and research on social-cognition development and moral development, from infancy to adolescence will be covered.

EDHD872 Young Children at Environmental Risk: Developmental and Intervention Issues (3 Credits)

Examination of impact of poverty on young children, their families, and communities. Epidemiological, physiological, and sociological studies will be reviewed.

EDHD875 Advanced Human Development and Neuroscience (3 Credits)

Advanced doctoral seminar in the biological bases of behavior. Identification of research problems and areas of application.

Prerequisite: EDHD775; or permission of EDUC-Human Development and Quantitative Methodology department.

Credit Only Granted for: EDHD811 or EDHD875.

Formerly: EDHD811.

EDHD878 Applied Research and Strategies (3 Credits)

Examine current human development research literature, define a research problem and design and implement a research study or review in collaboration with faculty.

Prerequisite: EDMS651; or permission of EDUC-Human Development and Quantitative Methodology department.

Repeatable to: 6 credits if content differs.

EDHD888 Apprenticeship in Human Development Research (1-8 Credits)

Apprenticeship in Human Development research.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

EDHD889 Practicum in Human Development (3-9 Credits)

Field experience in applied human development at a professional level of competence in a particular role with appropriate supervision.

Prerequisite: Credit not to be granted for experience accrued prior to registration; and open only to degree and certificate-seeking graduate students.

Restriction: Permission of EDUC-Human Development and Quantitative Methodology department.

Repeatable to: 9 credits if content differs.

EDHD898 Pre-Candidacy Research (1-8 Credits)**EDHD899 Doctoral Dissertation Research (1-8 Credits)**

Registration required to 12-18 hours for a Ph.D. dissertation.