Courses offered to students with non-degree status. Some courses may have prerequisites, require instructor’s approval, are available to non-degree students only in the summer or are limited in size due to the availability of computers.

The College of Education has one academic department, the Department of Education and Human Services.

Department of Education and Human Services

Professors. Gary M. Sasso, Ph.D. (Univ. of Kansas), dean; Ward M. Cates, Ed.D. (Duke), associate dean; Arpana G. Inman, Ph.D. (Temple), chairperson; Lee Kern, Ph.D. (Univ. of South Florida), associate chairperson; Linda M. Bambara, Ed.D. (Vanderbilt); Alec M. Bodzin, Ph.D. (North Carolina State); Christine L. Cole, Ph.D. (Wisconsin-Madison); George J. DuPaul, Ph.D. (Rhode Island); Edward S. Shapiro, Ph.D. (Univ. of Pittsburgh); Iveta McGurty Silova, Ph.D. (Columbia); Arnold R. Spokane, Ph.D. (Ohio State); George P. White, Ed.D. (Vanderbilt); Perry A. Zirkel, J.D., Ph.D. (Connecticut), LL.M. (Yale).

Associate Professors. Floyd D. Beachum, Ed.D. (Bowling Green State) endowed Bennett professor of urban school leadership; Grace L.L. Caskie, Ph.D. (Univ. of North Carolina); H. Lynn Columba, Ed.D. (Louisville); Thomas C. Hammond, Ph.D. (Virginia); Christopher T. H. Liang, Ph.D. (Univ. of Maryland); Patricia H. Manz, Ph.D. (Univ. of Pennsylvania); Jill Sperandio, Ph.D. (Univ. of Chicago); Alexander W. Wiseman, Ph.D. (Pennsylvania State); Susan S. Woodhouse, Ph.D. (Univ. of Maryland).

Assistant Professors. Minyi Shih Dennis, Ph.D. (Univ. of Texas at Austin); Bridget V. Dever, Ph.D. (Univ. of Michigan); Craig Hochbein, Ph.D. (Univ. of Virginia); Robin L. Hojnoski, Ph.D. (Univ. of Massachusetts); Peggy A. Kong, Ed.D. (Harvard); L. Brook Sawyer, Ph.D. (Univ. of Virginia); Brenna K. Wood, Ph.D. (Univ. of Arizona).

Professors of Practice. Louise E. Donohue, Ed.D. (Lehigh); Jon Drescher, P.D. (St. John’s); Sothy Eng, Ph.D. (Texas Tech); Scott R. Garrigan, Ed.D. (Lehigh); Christine G. Novak, Ph.D. (Univ. of

The department offers the following degrees:

Master of Education (M.Ed.) This degree is offered in the following professional specializations: elementary education, secondary education, special education, educational leadership, counseling and human services, globalization and educational change, international counseling, school counseling, and teaching and learning. Degree requirements vary from program to program.

Master of Arts (M.A.) The master of arts is available in either teacher education (secondary education or the teaching and learning degree programs) or comparative and international education. The teacher education M.A. focuses on enhancing both pedagogical skill and subject matter expertise of teachers. The comparative and international education M.A. examines educational policy and theory on an international level, preparing its graduates to work in educational research and policy organizations, government offices, ministries of education, and international development organizations. The teacher education student pursuing an M.A. must take graduate work in education plus 12 credits of graduate work in an academic field related to the area of teacher certification (typically, English, mathematics, political science, sociology, and physical and natural sciences). The comparative and international education student pursuing an M.A. must take graduate work in education plus 12 credits in one of four specific academic disciplines (sociology and anthropology, political science and international relations, economics, or history).

Master of Science (M.S.) The master of science degree is awarded in instructional technology. The master’s program in instructional technology focuses on the systematic planning and use of technology and is targeted toward individuals from varied backgrounds who wish to learn how to incorporate technology more effectively in diverse educational settings (including K-12, higher education, informal learning, and corporate training) or to learn how to train others to make such more effective use.
**Master in Business Administration/Master of Education (MBA/M.Ed.)** The MBA and master's of education joint degree program offers students the opportunity to acquire a solid foundation in both business and education. Designed to increase the administrative skill required in today's educational systems, the MBA/M.Ed. provides a framework in which excellent education and sound business practices can flourish. The MBA/M.Ed. will provide an additional option for students for business and students of educational leadership. The program should enhance the student's marketability in private and public sector education while providing students with an understanding of the cultures of both business and education.

**Educational Specialist (Ed.S.)** Specialized postmaster's degree programs for practitioners are available in school psychology.

**Certification Programs** The college offers programs of study leading to eligibility for Pennsylvania state certifications in various professional specialties including elementary and secondary teacher education, including certification in special education; supervisor of curriculum and instruction; superintendent; and K-12 principal. Certification programs vary in the number of credits required.

**IMPORTANT NOTE:** The Pennsylvania Department of Education (PDE) has divided elementary (K-6) certification into two separate certifications: Early Elementary (Pre-kindergarten through 4th grade) and Upper Elementary/Middle (4th grade through 8th grade). Secondary certification remains grades 7 through 12. Under these new regulations, effective January 1, 2011, there will no longer be a separate initial certification for special education; special education teachers must now also acquire one of the two elementary certifications or a secondary certification. Lehigh has decided to offer only the PreK-4th grade certification at the elementary level, although we will continue to offer secondary and special education certification. By PDE regulation, students already enrolled in our current K-6, secondary or special education initial certification-preparation programs must complete their programs of study by August 31, 2013. Students who are unable to complete their initial teacher certification eligibility programs by that date will need to complete one of our new PDE-approved teacher certification eligibility programs (PreK-4 or 7-12).

**Post-Baccalaureate Certificates** The college also offers post-baccalaureate certificate programs in international counseling, international development in education, project management (jointly offered through the College of Business and Economics and the College of Education), special education, teacher leadership, teaching English as a second language, and technology use in the schools. Post-baccalaureate certificate programs differ from the above-described certifications issued by agencies external to Lehigh (such as the Pennsylvania Department of Education). Lehigh's post-baccalaureate certificate programs are, instead, focused concentrations of 12 to 15 credits that students complete to enhance their professional credentials. Where appropriate, post-baccalaureate certificate programs may be included as part of the coursework of a degree program. [www.lehigh.edu/education/academics/certificates.html](http://www.lehigh.edu/education/academics/certificates.html)

**Doctor of Philosophy (Ph.D.)** The College of Education also offers the Ph.D. degree to students enrolled in the fields of comparative and international education, counseling psychology, school psychology, special education, and teaching, learning, and technology. No language examinations are required.

**Doctor of Education (Ed.D.)** The doctor of education degree program provides specialized study in educational leadership. Successful professional experience is required for admission to candidacy.

**Non-Degree Options** The non-degree options are designed for those individuals interested in taking a few courses in the College but not interested in pursuing a graduate degree. For information on the non-degree program, contact Donna Johnson at 610-758-3231 or email ineduc@lehigh.edu. There are two non-degree options as well: (1) Regular non-degree and (2) Non-degree for external certification.

Regular non-degree admission is for students who wish to take up to 12 credits of graduate coursework at Lehigh University without seeking a degree. Any transcript or other record from the University will clearly indicate the student status as non-degree. Non-degree students are not permitted to audit courses. University admissions criteria for non-degree graduate students are (a) a bachelor's degree from an accredited institution with an overall grade point average of at least 3.0 on a four-point scale (Applicants with undergraduate GPAs slightly below 3.0 may be admitted with approval from the department of Education and Human Services) or (b) to have achieved a GPA of 3.0 or higher on a four-point scale for a minimum of 12 graduate credits at another accredited institution. If English is not your first language, you must submit TOEFL scores.
Non-degree for external certification students are admitted to pursue coursework for the purpose of obtaining certification through an external accrediting agency. Applicants are expected to have an undergraduate GPA of 3.0 or higher on a four-point scale or to have achieved a GPA of 3.0 or higher on a four-point scale for a minimum of 12 graduate credits at another accredited institution. Applicants are assigned certification advisors on admissions and must work with the advisor to assure that they complete all requirements for certification satisfactorily. Students complete the coursework and any other required field experiences for the appropriate certification, with the number of credits and field experiences being dictated by the external accrediting agency. Given this external control of credit requirements, the number of credits will vary and will typically exceed the 12-credit limit for regular non-degree students. Certification involves qualitative components as well as credits; a non-degree student seeking such certification must meet the quality standards of the certification program, as well as completing the necessary coursework and field experiences.

**Changing from Non-Degree to Degree Status**

Non-degree students of either type may seek admission to a degree program. Non-degree students who seek admission to a degree program must meet all regular admissions criteria, complete all regular procedures, and present all documents normally required of degree-seeking applicants to that program. Courses taken by a non-degree student who later enters a degree program will count towards the completion of the program to the extent that those courses fall within the normal requirements of the program and to the extent that the student's performance in the course(s) is acceptable for degree program purposes. Any course that is counted towards the completion of a degree must be completed within the established time limits for that degree, whether taken initially as a degree or non-degree course.
While general courses are listed separately, the courses pertinent to each program are listed in the following text. Courses that are boxed are those that non-degree students can take.

**Comparative and International Education**

*CIE 400. Comparative and International Education (3)*
The goal of this course is to introduce students to the origins and development of the field of international and comparative education and to explore how both scholars and educational policymakers have engaged some of the debates that characterize policy and research in education around the world. Special attention is devoted to similarities and differences in educational policy and practice between advanced and developing capitalist, socialist and “transitional” societies. At the end of this course, students should be able to think about their school or educational system within a global context, and have some idea how to make meaningful comparisons.

*Open to non-degree students only with instructor permission.*

*CIE 401. Globalization & Contextualization (3)*
The goal of the course is clarify what globalization is and to consider the impact of globalizing ideas, structures, and cultures on education, and how educators and other stakeholders respond given their school’s or system’s unique global context. Through case studies and discussions with real-world school leaders, students explore ways that policies are “borrowed” and both educational cultures and structures are “institutionalized.”

*Open to non-degree students only with instructor permission.*

*CIE 402. Development and Evaluation of International Educational Projects (3)*
This course is an introductory exercise for students new to educational research, program evaluation and related areas (e.g., quality improvement, enhancing organizational performance, methods of social change, management training). Students will develop and conduct a professional on-site project evaluation of existing national and international projects, including initiatives undertaken by different international organizations (e.g., UNICEF, UNESCO, USAID), educational institutions, and schools (both public and private). Students will be accompanied and supervised throughout all stages of the research and evaluation process. No previous experience with evaluation research and empirical or qualitative data analysis is required.

*Open to non-degree students only with instructor permission.*

*CIE 403. Globalization and Curriculum Implications (3)*
This course investigates the impact of globalization on curriculum. In particular, it discusses how curriculum has historically been utilized in nation building; how tensions between the global and the local are inherent in curriculum; and how curriculum is a site of construction of national as well as global/cosmopolitan identities. Global citizenship is one of the major curricula themes spanning this dynamic intersection between the global and the local. This course will present several theoretical perspectives on this phenomenon and compare curricula across nations to understand how globalizing the curricula differs according to culture and language.

*Open to non-degree students only with instructor permission.*

*CIE 404. Issues and Institutions in International Educational Development (3)*
Explores theoretical approaches to understanding the role of education in international development by introducing students to institutions involved in international educational development in diverse global settings (e.g., United Nations, World Bank, NGOs, and state agencies). Discussions are framed by current debates in the fields of international and comparative education.

*Open to non-degree students only with instructor permission.*

*CIE 405. Experiencing the United Nations: Gender and Education in International Development (3)*
Building on the Lehigh University/United Nations partnership initiative, this course provides a structured practical experience for students to learn about the dynamics of UN and civil society relationships, focusing on the issues of gender and education in international development. Class activities include trips to the UN to attend NGO briefings and other events. Students develop experiences and skills in international development such as policy blogging, brief writing, and education sector analysis.

*Open to non-degree students only with instructor permission.*

*CIE 406. International Education Policy (3)*
Focuses on how policy is created, implemented, and evaluated in schools and educational systems from a comparative and international perspective. Provides a framework for a comprehensive analysis of the education “sector” in order to inform regional, national, or multinational educational policymaking. Students will apply this understanding to an analysis of education policy in a specific region or district (e.g., Pennsylvania) from a global policymaking perspective.

*Open to non-degree students only with instructor permission.*
*CIE 407. Grant Writing and Fund Raising in International Education Development (3)
Addresses NGO issues and needs and will develop leadership, problem solving, and practical grant writing skills focused on international education development. The course is designed for individuals working in international NGOs and schools and is designed to work in conjunction with a local or international NGO. Teams of students will develop a project proposal related to the agency’s primary service mission, articulate a fund-raising strategy, and raise capital on the basis of proposals developed in class.
*Open to non-degree students only with instructor permission.

CIE 412. Sociocultural Issues in Comparative and International Education (3)
This course examines social and cultural contexts of teaching and learning in developed and developing country contexts. The course combines theoretical and empirical readings to highlight the dynamic factors that shape the lives of learners inside and outside the classroom. The course is divided into two modules. The first module presents theoretical readings on the social and cultural context of schooling. The second module draws from empirical studies of social and cultural issues in developed and developing country contexts.

CIE 414. Globalization and Post-Colonialism in Education (3)
This course focuses on some of the central discussions in the field of comparative and international education and address the specific questions about the meaning of education and post-colonialism. Readings examine specific instances of the intersection of European colonialism, global capitalism, and international development in a variety of geographic settings, including Eastern/Central Europe, Africa, and Asia. Assignments focus on post-colonialism in specific countries to develop a historical perspective on the topic and to provide the basis for international comparison.

CIE 471. Globalization and Education Equity (3)
This course investigates how globalization affects education equity by examining group differences that result from race, ethnicity, culture, language, class, and gender. It critically analyzes existing systems of power and privilege that maintain the social constructions of cultural differences in the United States and globally. Through readings and class discussions, students are empowered to clarify and ground their own beliefs about education equity, while articulating a vision for equitable educational development as thoughtful, critical, and humane education researchers and practitioners.

CIE 491. Special Topics in Comparative and International Education: <Subtitle> (3)
Intensive study and discussion of a specialized area in comparative and international education. Subtitle will vary. May be repeated for credit as subtitle varies.

**Counseling Psychology**

*CPsy 427 (SchP 427). Assessment and Appraisal in Counseling (3)
Principles of psychological measurement (e.g., tests construction, technology, validity, reliability, functional utility). Ethical, legal, and cultural issues in the administration and interpretation of psychological tests. Case conceptualization, reporting and presentation.
*Open to non-degree students in spring only.

CPsy 436. Culture-Centered Career Intervention (3)
Examination of the career development process and interventions for children, adolescents, and adults with a culture-centered perspective. Study of theorists, vocational assessment process, and occupational and psychological information systems.

*CPsy 440. Introduction to Family Counseling (3)
Research and current trends in the practice of family counseling. Overview and analysis of major theoretical approaches of family therapy.
*Open to non-degree students in spring or fall semesters only

CPsy 442. Counseling and Therapeutic Approaches (3)
Theory, research, and technique of counseling within a cultural context. Prerequisites: admission to CPsy master's program or permission of counseling psychology program director.

CPsy 445. School Counseling – I (4)
Overview of the history, philosophy and current trends in school counseling. Emphasis is placed on (a) professional, ethical, and legal issues in counseling; (b) management and delivery of counseling services in a school setting and culturally diverse society; (c) professional development, certification and role identification; (d) collaboration and consultation with teachers, parents, and administrators. Students will be involved in a pre-practicum observation of school counselors in a pre-K-12 setting. Note: current clearances are needed for non-degree students as well.
*CPsy 448. School Counseling – II (3)
Emphasis on the social and cultural context of school counseling. Includes ethical, legal, and cultural issues in the administration and interpretation of psychological tests used in pre-K-12 settings. Focus on a special topic such as school violence or substance abuse prevention, school and community interaction, and the social and cultural context of school counseling, etc. The course will also include observations in schools. Prerequisite: CPsy 445.
*Open to non-degree students in summer only. Note: current clearances are needed for non-degree students as well.

*CPsy 449. School Counseling – III (4)
Theory and methods of consultation; development and implementation of student assistance programs; intra- and inter-agency collaborations. The course will also include observations in schools.
*Open to non-degree students in summer only. Note: current clearances are needed for non-degree students as well.

CPsy 466. Current Issues in Counseling and Therapy (1-6)
Examination of an area of counseling or therapy that is of topical interest to students and faculty. May be repeated for credit.

*CPsy 472. Human Development Across the Lifespan (3)
An examination of prevailing theories of human growth and development across the lifespan. Examination of the interactive effect of various age groups upon one another. Particular emphasis on the helping relationships. *Open to non-degree students only with permission of program.

CPsy 484 (SchP 484). History and Systems of Psychology (3)
This doctoral level course is designed as an overview of the history of psychology in the Western world. The historical approaches to this task will include a historical developmental approach to the origins and changes of ideas over time, the study of great persons and schools of thought, and a look at the Zeitgeist of each. This course will examine the nature of psychology as a whole, and the influence of philosophical worldviews in areas such as epistemology, ontology, teleology, and axiology. Part of this study regards the nature of science, and its power and limitations as applied to the understanding of human beings.

Education

Educ 388. Statistical Computing (3)
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. Prerequisite: Educ 408 or consent of instructor.

Educ 408. Introduction to Statistics (3)
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)
Emphasis on analysis of variance designs including one-way, factorial, nested, and repeated measures designs. Introduction to multiple regression and the analysis of covariance. Prerequisite: Educ 408 or consent of instructor.

Educ 410. Univariate Statistical Models (3)
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 non-standard models and generalization to complex designs. Prerequisite: Educ 409 or consent of the instructor.

Educ 411. Multivariate Statistical Models (3)
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. Prerequisite: Educ 410 or consent of the instructor.

Educ 412. Advanced Applications of Psychometric Principles (3)
Conceptual examination of exploratory and confirmatory factor analysis, cluster analysis, latent-trait modeling, and other advanced psychometric topics. Prerequisites: Educ 409 or equivalent or SchP/CPsy 427.

Educ 491. Advanced Seminars: (with subtitle) (1-6)
Intensive study and discussion of a specialized area. Title will vary. May be repeated for credit as title varies.

Educational Leadership

EdL 400. Organizational Leadership and Change Management (3)
Theory development relating to individuals and organizations emphasizing leadership, decision-making, motivation, and change. Analysis of existing leadership approaches focusing on demonstrating the application theories to administrative practice.
*EdL 420. Data Based Decision Making (3)
Theory, research, and processes associated with the design and management of school curriculum; implementation of
effective instructional and assessment practices enhancing student learning. School leader’s role in designing and
implementing a comprehensive school improvement process, and using data to guide curriculum, instruction and
assessment program.
*Open to non-degree students only with permission of program.

EdL 422. Curriculum Management for the School Executive (3)
A survey of the methods used to facilitate a curriculum development process based on the theories and findings from
research and practice. Application of concepts to practical problems in curriculum leadership to acquire skills in the change
process for instruction innovation. Emphasis on current theory and research in standards, technology, and curriculum
integration.

EdL 430. Development and Administration of Special Education Programs (3)
Exploration of the research and practice of an effective special education program. Emphasis on curriculum development,
field-based research, and data-based decision making program design and evaluation, and the relationship of the special
education program to the pupil services program and the regular curriculum.

EdL 432. Special Education Law (3)
An overview of the relevant legislation, regulations, and case law concerning the education of students with disabilities in
pre-k through secondary school.

EdL 434. Leadership and Management of Special Education Programs (3)
Introduction to the management practices related to effective leadership of special education programs including budget
development and management, staffing, instructional practices, student assessment practices, and parent involvement.

EdL 440. Development and Administration of Pupil Services Programs (3)
Exploration of the research and practice of an effective comprehensive pupil services program. Emphasis on involvement of
community agencies, field-based research, and data-based decision-making, program design and evaluation, and the
relationship of the pupil services program to the regular and special education curriculum.

EdL 442. Leadership and Management of Pupil Services Programs (3)
Overview of the management practices related to effective leadership of pupil services programs, including budget
development and management, staffing, instructional practices, community agency partnerships, student assessment, legal
issues, and parent involvement.

EdL 450. Curriculum Design in a Global Society (3)
Exploration of global issues and their effects on what is taught in schools, specifically in international schools. Emphasis on
the analysis of curriculum and the influence that culture plays in decision making.

EdL 452. Comparative Education (3)
Emphasis on the nature and purpose schools in various cultural contexts and the major problems and trends occurring
throughout the world.

*EdL 467. Supervision and Professional Development (3)
Emphasis on establishing skills in human resource management and supervision, including staff selection, supervision
models, assessment and feedback methods, managing a diverse workforce, and adult development related to professional
growth options. This course is designed specifically for individuals enrolled in a supervisory certification program.
*Open to non-degree students only with permission of program.

Overview of the foundations, principles, and theories of curriculum, teaching, and learning. Emphasis on historical
perspectives, teaching and learning for understanding, and schools as professional organizations. The purpose is to provide
prospective administrators with the background for developing a balanced and challenging school-wide curriculum, for
supervising instruction, and for supporting school improvement.

EdL 470. Special Topics in Educational Leadership: (with subtitle) (1-6)
Intensive study and discussion of a specialized area. Title will vary. May be repeated for credit as title varies.

*EdL 481. Policy and Politics in Public Education (3)
Analysis of the forces, factors, agencies, formal governmental systems and informal subsystems that influence educational
policy in local districts and state and national governments.
*Open to non-degree students only with permission of program.
School Psychology

SchP 402 (SpEd 402.) Applied Behavior Analysis (3)
Theory and application of behavior modification methods in classroom and clinical settings. Topics include behavior analysis, outcome research, task utilization, and single case research.

SchP 404. Historical and Contemporary Issues in School Psychology (3)
History of psychology, education, and school psychology. Roles and function of school psychologist; legal and ethical aspects of school psychology.

SchP 426. Advanced School and Family Interventions (3)
Overview of school-based and family-based intervention strategies for children and adolescents presenting interpersonal, emotional, developmental or behavioral challenges. Examples of topics covered include crisis intervention, peer-mediated interventions, self-management interventions, behavioral parent training, interventions for child abuse/neglect and computer-assisted instruction. Prerequisite: SchP 402 or permission of instructor.

*SchP 427 (CPsy 427). Assessment and Appraisal in Counseling (3)
Principles of psychological measurement (e.g., tests construction, technology, validity, reliability, functional utility). Ethical, legal, and cultural issues in the administration and interpretation of psychological tests. Case conceptualization, reporting and presentation.
*Open to non-degree students in spring only.

SchP 484 (CPsy 484). History and Systems of Psychology (3)
This doctoral level course is designed as an overview of the history of psychology in the Western world. The historical approaches to this task will include a historical developmental approach to the origins and changes of ideas over time, the study of great persons and schools of thought, and a look at the Zeitgeist of each. This course will examine the nature of psychology as a whole, and the influence of philosophical worldviews in areas such as epistemology, ontology, teleology, and axiology. Part of this study regards the nature of science, and its power and limitations as applied to the understanding of human beings.

Special Education

SpEd 330. Special Topics in Special Education: (with subtitle)(1-3)
Current issues in the education of individuals with special needs. Titles vary. May be repeated for credit as title varies.

SpEd 332. Education and Inclusion of Individuals with Special Needs in K-12 (3)
Overview of social, developmental, legal, and educational issues and practices related to the special education of individuals with disabilities. Covers social, environmental, and physiological etiology; development; identification; learning characteristics; and needs of individuals identified for special education. Emphasizes meeting diverse needs of students in general education classrooms through evidence-based practices and adaptations matched to learner needs. Addresses legal rights of students and their families, as well as legal responsibilities of teachers as required by IDEIA and other related special legislation.
Open to non-degree students in spring & summer only.

SpEd 338. Emotional and Behavioral Disorders of Children (3)
Definition, classification, etiology, treatment, and historical perspective of children and adolescent disorders.

SpEd 402 (SchP 402). Applied Behavior Analysis (3)
Theory and application of behavior modification methods in classroom and clinical settings. Topics include behavior analysis, outcome research, task utilization, and single case research.

*SpEd 404 (TLT 404). Diversity, Families, and School Collaborations in K-12 (3)
Cultural and linguistic diversity as critical variables in educational equity for all learners, including ELL. Explores home-school partnerships, family and professional collaboration, and teacher self-awareness. Implementing culturally sensitive and responsive classroom practices as well as forming collaborative relationships with families that respect diversity of family contexts. Collaborative, multidisciplinary teaming to support, optimize, and advocate for student’s educational needs and connect to community services and resources available to individuals and families. Addresses family mental health issues and wraparound services.
*Open to non-degree students only with program director permission.
*SpEd 409 (TLT 409). K-12 Classroom Environment and Management (3)
Designing inclusive classroom environments that maximize learning. Emphasis on fostering a community of learners using connections among classroom arrangement, classroom management, and cognitive development to create positive learning outcomes for all students, including ELL learners and students with disabilities. Addresses the tiered model of prevention and positive behavior support, including the role of functional assessment and individual positive behavior support plans in classroom management. Highlights the ways a positive climate for learning involves establishing and maintaining partnerships with families.
*Open to non-degree students only with program director permission.

*SpEd 411 (TLT 411). Early Childhood Education (3)
Introduction to development of early childhood education in the U.S. Emphasizes evidence-based methods and materials to assist young children in the learning process, including arrangement of indoor/outdoor space, developmentally appropriate practices, and the design of instruction to foster young children's emotional, social, language, cognitive, physical, and creative development. Includes embedded instruction and adaptations for students with identified disabilities, children at risk for developing disabilities, and children with culturally and linguistically diverse backgrounds, and family collaboration within the instructional planning process.
*Open to non-degree students only with program director permission.

**Teaching, Learning and Technology**

TLT 367 (ES 367). Environmental Education (3)
Introductory environmental education course designed to prepare students to implement environmental education opportunities in formal and non-formal education settings. Topics include history and philosophy of environmental education, environmental laws and regulations, GIS, environmental issues and decision-making, curriculum integration and environmental education teaching methodologies. This is a Web-enhanced course containing both online and fieldwork components.

TLT 368. Teaching & Learning with Geospatial Tools (3)
Exploration of geospatial tools, including but not limited to global positioning systems (GPS), geographic information systems (GIS), and related visualization tools (e.g., Google Earth). Application of these tools and techniques to instructional settings, including appropriate pedagogy and assessment.

TLT 380. Child Development and Cognition (3)
Introduction to physical, motor, perceptual, cognitive, language, emotional, social, and gender development of young children and adolescents. Developmental history, theories, and research, as well as the effect of culture, family, peers, media, and schooling on the individual and groups. Students investigate typical and atypical development and explore the implications of individual differences for teaching and learning, with an emphasis on evidence-based instructional practices designed to optimize the growth and development of all learners. Explores mental health issues and at-risk students.

TLT 394. Special Topics in Education: (with subtitle) (1-3)
Examination of a topic of research or professional interest in education. Subtitle will vary. May be repeated for credit as subtitle varies.

TLT 401. Overview of Teaching and Learning (3)
Foundations and key concepts in learning and instructional theory. Cognition and brain-based research with a focus on innovations in teaching and learning.

TLT 403. Instructional Design
Social, cognitive, and environmental factors in designing for teaching and learning. Systems theory applied to learning settings. Special emphasis on motivational theories and technological affordances. Prerequisite or co-requisite TLT 401 or POI.

*TLT 404 (SpEd 404). Diversity, Families, and School Collaborations in K-12 (3)
Cultural and linguistic diversity as critical variables in educational equity for all learners, including ELL. Explores home-school partnerships, family and professional collaboration, and teacher self-awareness. Implementing culturally sensitive and responsive classroom practices as well as forming collaborative relationships with families that respect diversity of family contexts. Collaborative, multidisciplinary teaming to support, optimize, and advocate for student’s educational needs and connect to community services and resources available to individuals and families. Addresses family mental health issues and wraparound services.
*Open to non-degree students only with program director permission.
*TLT 407. Instructional Design for K-12 Classrooms (3)*  
Introduces the systematic design of instruction following the Response to Instruction and Intervention (RtII) and Universal Design for Learning models. Explores theories of learning and instructional applications as a part of technology-based and standards-aligned classroom education grounded in the use of a quality, research-based core curriculum and effective instructional practices to meet the needs of all learners. Addresses appropriate use of instructional technologies for universal learning. Students will plan, design, and develop student-centered, standards-aligned, technology-supported instruction and appropriate learner assessments.  
*Open to non-degree students only with program director permission.*

*TLT 409 (SpEd 409). K-12 Classroom Environment and Management (3)*  
Designing inclusive classroom environments that maximize learning. Emphasis on fostering a community of learners using connections among classroom arrangement, classroom management, and cognitive development to create positive learning outcomes for all students, including ELL learners and students with disabilities. Addresses the tiered model of prevention and positive behavior support, including the role of functional assessment and individual positive behavior support plans in classroom management. Highlights the ways a positive climate for learning involves establishing and maintaining partnerships with families.  
*Open to non-degree students only with program director permission.*

TLT 410. The Writing Process (3)  
Developmental characteristics of children's writing and relationships among writing, spelling and reading. Predictors of writing achievement, teaching strategies and activities, and evaluation schemes will be emphasized, K-12.

*TLT 411 (SpEd 411). Early Childhood Education (3)*  
Introduction to development of early childhood education in the U.S. Emphasizes evidence-based methods and materials to assist young children in the learning process, including arrangement of indoor/outdoor space, developmentally appropriate practices, and the design of instruction to foster young children’s emotional, social, language, cognitive, physical, and creative development. Includes embedded instruction and adaptations for students with identified disabilities, children at risk for developing disabilities, and children with culturally and linguistically diverse backgrounds, and family collaboration within the instructional planning process.  
*Open to non-degree students only with program director permission.*

TLT 424. Children’s Literature in Elementary Education (3)  
Role of literature in the instructional program of the elementary schools. Use of trade books for individualized instruction in reading, language arts, mathematics, science, and social studies.

TLT 458. Introduction to Multimedia Programming and Resource Development for Learning (3)  
Introduction to programming and resource development tools used in the creation of interactive multimedia teaching and learning materials.

TLT 460. Advanced Multimedia Programming and Resource Development for Learning (3)  
Advanced exploration of programming and resource development tools used in the creation of interactive teaching and learning materials.  
*Prerequisite: TLT 458 or POI.*

TLT 462. Special Topics in Development of Instructional Resources and Technologies for Learning (subtitle) (1-3)  
Focus on using advanced Website and digital resource development-and-manipulation tools to create multimedia learning materials. Topics will vary (for example, Database-Driven Web Development; Assistive Devices for Special Populations; Programming Handheld Devices; Multimedia Resource Development; Media Production for Instructional Programming). May be repeated for credit under different subtitles.  
*Prerequisite: TLT 460 or POI.*

TLT 470. Technology for Teaching and Learning (3)  
Analysis of available technologies (hardware, software, and Web resources), and identification of technologies matched to learner needs in traditional and/or non-traditional settings.

TLT 474. Large-scale Planning and Implementation of Educational Technology (3)  
Addresses topics such as planning, maintaining, funding, networking, staffing, staff development, and monitoring of educational technology implementations.

TLT 476. Assessment of Instructional Technologies (3)  
Techniques for evaluating technology implementations for teaching and learning. Focus on topics such as instrumentation, data collection and analysis, drawing conclusions from data sets, and preparing reports for stakeholders.