

Courses that are boxed are 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*; George J. DuPaul, Ph.D. (Rhode Island), *chairperson*; Linda M. Bambara, Ed.D. (Vanderbilt), *associate chairperson*; Christine L. Cole, Ph.D. (Wisconsin-Madison); Lee Kern, Ph.D. (Univ. of South Florida), *Iacocca Professor of Education*; Edward S. Shapiro, Ph.D. (Univ. of Pittsburgh); Arnold R. Spokane, Ph.D. (Ohio State); George P. White, Ed.D. (Vanderbilt); Roland K. Yoshida, Ph.D. (Univ. of Southern California); 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*; Mary Jean Bishop, Ed.D. (Lehigh); Alec M. Bodzin, Ph.D. (North Carolina State); Mary Beth Calhoon, Ph.D., (Vanderbilt); Grace I.L. Caskie, Ph.D. (Univ. of North Carolina); H. Lynn Columba, Ed.D. (Louisville); Arpana G. Inman, Ph.D. (Temple); Patricia H. Manz, Ph.D. (Univ. of Pennsylvania); Tina Q. Richardson, Ph.D. (Maryland); Jill Sperandio, Ph.D. (Univ. of Chicago); Alexander W. Wiseman, Ph.D. (Pennsylvania State).

Assistant Professors. Cirleen DeBlaere, Ph.D. (Univ. of Florida); Kathryn Ann DiPietro, Ph.D. (Tennessee); Thomas C. Hammond, Ph.D. (Virginia); Robin L. Hojnoski, Ph.D. (Univ. of Massachusetts); Minyi Shih, Ph.D. (Univ. of Texas at Austin); Iveta McGurty Silova, Ph.D. (Columbia); Brenna K. Wood, Ph.D. (Univ. of Arizona).

Professors of Practice. Jon Drescher, P.D. (St. John's); Sothy Eng, Ph.D. (Texas Tech); Christine G. Novak, Ph.D. (Univ. of Iowa).

Adjunct Faculty. Aimee-Nicole C. Adams, Ph.D. (Lehigh); Tonya B. Amankwatia, Ph.D. (Lehigh); Juan R. Baughn, Ed.D. (Temple); Ian T. Birky, Ph.D. (Oklahoma State); Raymond J. Boccuti, Ed.D. (Lehigh); Timothy E. Bonner, M.Ed. (Kutztown); Carol S. Derham, Ed.D. (Lehigh); Louise E. Donohue, Ed.D. (Lehigh); Roger J. Douglas, Ed.D. (Lehigh); Carolyn E. Evans, B.A. (Arcadia); Laurie Gray Evans, Ph.D. (Lehigh); Deidre R. Farmbry, Ed.D. (Univ. of Pennsylvania); Todd A. Fay, D.Ed. (Penn State); William P. Feigley, Ed.D. (Lehigh); Sandra G. Fellin, Ed.D. (NOVA Southeastern); Diane E. Flisser, Ed.D. (Lehigh); Edwina Frasca-Stuart, Ed.D. (Pennsylvania State); Susan N. Fuller, Ph.D. (Univ. of Nebraska); Deborah L. Gardner, Ph.D. (New Mexico State); Scott R. Garrigan, Ed.D. (Lehigh); Michael P. George, Ed.D. (Univ. of Missouri-Columbia); Nancy L. George, Ed.D. (Univ. of Missouri-Columbia); Ronald Goldberg, Ph.D. (Lehigh); Mary R. Goodman, Ed.D. (Lehigh); William E. Haberl, Ed.D. (Lehigh); Roberta A. Heydenberk, Ed.D. (Lehigh); Warren R. Heydenberk, Ed.D. (Colorado); Daphne Pappas Hobson, Ed.D. (Columbia Univ.); Rachel A. Holler, Ed.D. (Lehigh); Tiedan Huang, M.S. (Lehigh); Kevin Kelly, Ph.D. (Lehigh); Lisa A.W. Kensler, Ed.D. (Lehigh); Ilena D. Key, M.A. (Columbia); Eric M. Klein, Ph.D. (Univ. of So. Carolina); Mark J. Klein, J.D. (Rutgers); Freya Koger, Ph.D. (Lehigh); Christina K. Lutz-Doemling, Ed.D. (Lehigh); Steven V. Mancuso, Ed.D. (Lehigh); Beverly A. Martin, Ed.D. (Lehigh); Lawrence E. Martin, Ph.D. (Kent State); Stacy D. Martin, Ph.D. (Lehigh); Warren F. Mata, Ed.D. (Lehigh); John McGovern, Ed.D. (Temple); James R. Newcomer, Ed.D. (Lehigh); Bridget O'Connell, Ed.D. (Lehigh); Merris M. Page-Smith, Ed.D. (Univ. of Sarasota); Jacqueline S. Phillips, Ed.D. (Univ. of Northern Colorado); Thomas J. Power, Ph.D. (Univ. of Pennsylvania); Ralph H. Pruitt, Ed.D. (Lehigh); Susan L. Rarick, Ph.D. (Lehigh); Carol M. Richman, Ph.D. (Virginia Commonwealth); Laura Roberts, Ph.D. (Pennsylvania State); Tina M. Roemersma, Ph.D. (Lehigh); Joseph J. Roy, Ed.D. (Lehigh); Jeffrey M. Rudski, Ph.D. (Univ. of Minnesota); Tina Santilli, M.A. (George Washington); Julie K. Santoro, M.S.P. (Univ. of South Carolina); Thomas L. Seidenberger, Ed.D. (Widener); Bruce S. Sharkin, Ph.D. (Univ. of Maryland); Jack P. Silva, Ed.D. (Lehigh); Timothy J. Silvestri, Ph.D. (Lehigh); Elizabeth Sims-Pottle, Ed.D. (Lehigh); Carole S. Smith, M.S. (Temple); David R. Snyder, Ed.D. (Lehigh); Natalie G. Sokol, Ph.D. (Lehigh); Talida M. State, Ph.D. (Lehigh); Bruce M. Taggart, Ph.D. (Connecticut); Barbara J. Thompson, Ph.D. (Univ. of Maryland); Laurence R. Upton, Ph.D. (Univ. of Minnesota); Samuel A. Varano, Ed.D. (Lehigh); Patricia L. Waller, Ed.D. (Lehigh); Glenn D. Walters, Ph.D. (Texas Tech); James Warfel, Ed.D. (Temple); David R. Weiskotten, Ph.D. (Lehigh); Kenneth K. Zellner, M.Ed. (Kutztown).

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, elementary school counseling, secondary 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 special education, pupil services, or 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

Doctor of Philosophy (Ph.D.) The College of Education also offers the Ph.D. degree to students enrolled in the fields of counseling psychology, learning sciences and technology, school psychology, and special education. The requirements for this degree are the same as those for the Ph.D. in the other colleges and as described in previous sections. 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. The requirements for the Ed.D. degree parallel those already stated for the Ph.D. degree.

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 boxed are those that non-degree students can take.

Education

Educ 383. Supervised Research in Applied Psychology (1-3)

Provides undergraduate junior and senior psychology majors a formal supervised research experience in applied psychology. Students are assigned for the semester to a research team led by a participating faculty member in the counseling psychology or school psychology programs in the College of Education. *Repeatable up to 6 credits.*

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 402. Developmental Psychology (3)

Survey of theories and research concerning perceptual, cognitive, social, and personality development through infancy and childhood. *Prerequisite: graduate standing or consent of instructor.*

Educ 403. Research (3)

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

Educ 405. Qualitative Research Methods (3)

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

Educ 408. Introduction to Statistics (3)

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 419 (MLL 419). Second Language Acquisition (SLA) Theory (3)

This course introduces theories of second-language acquisition, including issues of acquisition of English as a second language as well as other languages. Various theories of communication and language acquisition will be covered.

Educ 421 (MLL 421). Intercultural Communication (3)

Language is ambiguous by nature, and discourse is interpreted in cultural and linguistic contexts. This course covers different cultural and linguistic strategies individuals use to communicate, essential concepts for interacting with individuals from other cultural and linguistic backgrounds, and different strategies of communication as defined by specific cultures. Covering the theory and practice of intercultural interaction, the course examines assumptions about language and culture and includes practical advice to help students develop the cultural sensitivity essential for communication today.

Educ 422. Theory and Practice for Second Language Learning (3)

This course presents the application of second language acquisition (SLA) theories in relationship to teaching, and reviews methods and materials needed for ESL instruction in a regular classroom and in a pullout program. This course will demonstrate the knowledge of fundamental concepts and practices of English as a second language (ESL) instruction with an emphasis on instructional materials and strategies. Participants will be able to identify appropriate materials and resources to be used with students at each level of English proficiency.

Educ 423. Second Language Assessment (3)

This is a broad-spectrum course around the use of assessment tools, and other evaluation measurements for diagnosis, prescription, and evaluation of students in English as a second language (ESL) programs. This course will address part three: English Language Learners (ELLs) Language Support Services Knowledge. Participants will learn the effective assessment practices and support services available to ELL students. Participants will examine, explore and understand the purposes for assessment, multiple assessment models, use of evaluation techniques, scaffolding of assessments, and formal/informal assessment tools. Finally, participants will gain hands-on experience in test administration, interpretation and reporting.

Educ 451. Applied Principles of Cognitive Psychology (3)

Basic principles and contemporary theories of cognitive psychology will be covered, especially regarding the application of these principles to education. Experimental research relevant to contemporary theories of cognitive psychology and the application of these theories in educational settings will be reviewed.

Educ 461. Single-Subject Research Design (3)

Experimental designs for use with small N's. Topics include design theory and application, experimental validity (internal, external, statistical conclusions and construct validity) and an overview of data analysis procedures.

Educ 471 (CPsy 471). Diversity and Multicultural Perspectives (3)

Examination of the influence of culture, gender, and disabilities on behavior and attitudes. Historical and current perspectives on race, culture, gender, and minority group issues in education and psychology. Lecture/small group discussion. *Course is restricted to graduate students in the College of Education only.*

Educ 473 (SSP 473). Social Basis of Human Behavior (3)

Development of human behavior from a social psychological perspective. Emphasis placed on the impact of society upon school-age children and adolescents.

Educ 486. Doctoral Qualifying Research Project (1-3)

Design and implement research project under faculty supervision to meet requirements for doctoral programs. *May be repeated for credit.*

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.*

Educ 493. Internship in: (with subtitle) (1-6)

Opportunity for students to apply theory to practice in a variety of educational settings. Students will be supervised in the field and participate in seminars dedicated to addressing specific concerns and issues encountered during their experience. *Prerequisite: consent of the program director.*

Educ 494. Field Work in: (with subtitle) (3)

Identification of significant problems in an educational environment, review of the literature, and development of appropriate research plans.

Educ 495. Independent Study in: (with subtitle) (1-6)

Individual or small group study in the field of specialization. Approved and supervised by the major adviser. *May be repeated.*

Educ 496. Doctoral Research Seminar (3)

For doctoral students. Research design and application to various kinds of educational problems; data collection and analysis. Criticism and evaluation of student proposals. *May be repeated for a maximum of nine credits.*

PMGT 401. Project Management: Course Framework & Project Leader Assessment (1)

Introduction to the Project Management Certification Course; syllabus, requirements and deliverables. Students will become acquainted with: the terminology, nine knowledge areas, relationships to other disciplines, project management context and processes. Introduction to the logistical vehicles for course delivery and the tools to be used. Students will also assess themselves as project leaders and explore project leader competencies, roles, responsibilities and stakeholder relationships.

PMGT 402. Project Management: Skills and Abilities for Effective Leadership of Teams (1)

Students will enhance project team leadership skills, define the work environment of project teams, team selection, develop a team charter, clearly define the roles and responsibilities of all project team members, set team guidelines, learn methods to promote teamwork, understand the stages of development, manage team dynamics. Additional skills covered: delegation, managing accountability without direct authority over project team members, managing dysfunctional teams, performance improvement, input to performance appraisals, rewards, recognitions, celebrations. *Prerequisite: PMGT 401.*

PMGT 403. Project Management: Initiating the Project and Planning Scope and Schedule (2)

Students will learn techniques for deciding whether to undertake a project and for planning project outcomes and schedules. The relationship of projects to organizational planning and budgeting, information and performance appraisals systems will be discussed. Approaches will be shared for identifying and classifying project stakeholders and designing and conducting a cost benefit analysis. How to define desired project outcomes clearly and completely and how to determine project work to be performed using decomposition and templates will be addressed. Students will learn how to develop a project charter, a scope statement, a Work Breakdown Structure, a WBS dictionary and a Linear Responsibility Chart. How to create a network diagram and analyze schedule possibilities using the Critical Path Method (CPM) and the Program Evaluation and Review Technique (PERT) will be explained. Fast tracking and crashing a schedule will also be explored. Displaying a schedule with a Gantt Chart, key events list and activities will be illustrated. How to support these activities using MS Project will be demonstrated. *Prerequisites: PMGT 401, PMGT 402.*

PMGT 404. Project Management: Planning Resources, Communication, Quality and Risk Management (2)

In this course, students will learn how to estimate the needs for personnel and other types of projects resources, to develop a project budget and to plan for additional project support activities. Determining the type, amount and timing of resource needs will be emphasized. Approaches to resource leveling will be discussed. The different types of project costs will be explained. The use of analogous estimating, parametric modeling, bottom-up estimating and computerized tools to estimate costs will be explored. Planning to ensure project quality and coordinate project communications will be addressed. Identifying, assessing, and preparing a plan to manage project risks will also be discussed. Planning for project procurement and associated solicitations will be explained. Students will learn how to develop resource matrices, loading charts and grafts and a project budget. How to support these activities using MS Project will be demonstrated. *Prerequisites: PMGT 401, PMGT 402, PMGT 403.*

PMGT 405. Project Management: Project Leader Communications Expertise and Evaluating Team Performance (1)

The purpose of this weekend seminar is to strengthen the project leader's communication skills, change-management skills, conflict resolutions skills, and team evaluation skills. Focus areas will also include the following: understanding the art and science of effective listening, managing multiple expectations, communicating "bad news," and learning tools and techniques for project team evaluation. *Prerequisites: PMGT 401, PMGT 402, PMGT 403, PMGT 404.*

PMGT 406. Project Management: Implementing and Managing Projects (2)

Students will learn techniques and processes to start and perform the actual project work. Suggestions for working successfully in a matrix management environment will be discussed. Information systems to track schedule performance, labor charges and project expenditures will be expressed. Developing escalation procedures to address project conflicts issues will be emphasized. Procedures for controlling labor and fund charges to a project will be introduced. Key project review and decision meetings will be identified. Planning and implementing quality assurance activities will be addressed. Planning for, awarding and administering contracts will be discussed. How to support these activities using MS Project will be demonstrated. *Prerequisites: PMGT 401, PMGT 402, PMGT 403, PMGT 404, PMGT 405.*

PMGT 407. Project Management: Controlling Performance and Assessing Outcomes (2)

Students will learn how to monitor and control project activities in progress and how to bring a project to closure. Approaches for assessing project products and services produced will be explored. Techniques for evaluating schedule and cost performance will be introduced. Variance analysis and earned value analysis will be explained. Quality control and risk monitoring and control will be discussed. Change control systems and procedures will be explained. How to prepare focused progress reports and conduct effective project meetings will be discussed. Requirements for closing out contracts and procurements will be detailed. Obtaining user acceptance, closing labor and fund charge accounts and other administrative activities will be discussed. Designing and conducting a post-project review will be explored. How to support these activities using MS Project will be demonstrated. *Prerequisites: PMGT 401, PMGT 402, PMGT 403, PMGT 404, PMGT 405, PMGT 406*

PMGT 408. Project Management: Problem Solving, Decision Making and Ethics (1)

This 2-day seminar focuses on developing problem solving and ethical decision-making skills. Students will learn to recognize project problems, frame the problem, assess risk, manage risk, plan contingencies, recognize the escalation points, and apply alternate methods. Students will also participate in ethical exercises to strengthen their ability to recognize ethical dilemmas and evaluate decisions. *Prerequisites: PMGT 401, PMGT 402, PMGT 403, PMGT 404, PMGT 405, PMGT 406, PMGT 407*

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: NGOs in Education Policy and Practice (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 NGO/UN relationships by representing one of the underrepresented international NGOs at the United Nations. Equips students with necessary experience, understanding, and skills in international education development such as policy 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 408: Thesis Writing (3)

Capstone course requiring intensive research and writing with the supervision of Comparative & International Education program faculty. The result is a master's-level thesis reporting the investigation, analysis and results related to a relevant topic in the field of comparative and international education.

Counseling Psychology**CPsy 407 (SchP 407). Crisis Management in the Schools (3)**

This course is designed to provide students with knowledge and skills related to crisis preparedness and intervention in the schools. Relevant theories and research literature will be explored as well as practical elements of crisis response that are applicable to all school systems. In addition, intervention strategies and protocols will be examined and discussed.

***CPsy 427 (SchP 427). Standardized Tests, Measurement and Appraisal (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. *Permission of instructor is required.*

**Open to non-degree students in summer only.*

CPsy 430. Professional Seminar (3)

Professional, ethical, and legal issues in counseling. Management and delivery of counseling services in a culturally diverse society. Professional development, certification, licensure, and role identification.

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 439. Theory and Practice of Group Counseling (3)

Introduction to the process of group counseling and therapy. Selection of group members; group rules; group procedures with children, adolescents and adults; ethical considerations with groups. Study of research on group processes, group therapy, and group leadership. *Prerequisites: permission of the program coordinator required.*

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.

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 coordinator.*

CPsy 443. Counseling and Therapeutic Approaches Laboratory (1)

One-credit laboratory will cover counseling skills used in diverse theoretical approaches. *Must take along with CPsy 442.*

CPSY 445. Elementary & Secondary School Counseling – I (4)

Overview of the history, philosophy and current trends in elementary and secondary 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 K-12 setting.

***CPSY 448. Elementary and Secondary School Counseling – II (4)**

Emphasis on the social and cultural context of elementary and secondary school counseling. Includes ethical, legal, and cultural issues in the administration and interpretation of psychological tests used in 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.

**Open to non-degree students in summer only.*

***CPSY 449. Elementary and Secondary 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.*

CPSY 451. Helping Skills (3)

Helping Skills is a course designed to provide counselor trainees with didactic and experiential learning opportunities to facilitate and enhance beginning counseling skills. Counselor trainees will begin to develop an understanding of the counselor's role in assisting or inhibiting client change. This course utilizes such techniques as modeling, role-playing, audiotape feedback, as well as other learning modalities. Particular emphasis is given to theoretical frameworks, cultural competency, and self-understanding.

CPSY 452. Counseling Issues and Skills: Facilitating Healthy Adjustment (3)

Course assists counselors in developing proficiency in helping skills and an understanding of the counselor's role in facilitating or inhibiting client change. Focus is on gaining knowledge related to mental health issues for third culture children and adolescents that include (a) cultural adjustment, (b) eating disorders, (c) depression and suicidality, (d) substance abuse, (e) anxiety, (f) family dysfunction, and (g) career development.

CPSY 453. Counseling Issues and Skills: Building Healthy Communities (3)

The objectives of this course are for students to develop proficiency in counseling skills and gaining knowledge related to constructing prevention programs for children and adolescents that include (a) substance abuse, (b) sexually transmitted disease and teen pregnancy, (c) eating disorders, (d) violence prevention, and (e) resiliency and competency promotion programs. Special focus will be paid to understanding the components of an effective crisis management plan.

CPSY 455. Counseling Issues and Skills: Advanced Techniques in Counseling (3)

The objectives of this course are to help students expand knowledge of traditional counseling theories and facilitate the development of basic counseling and assessment skills. Specifically, the course is designed to: (1) Enhance students' understanding of the intersection of characteristics of effective helping, stages of the helping relationship, and the uses of counseling techniques; (2) Expand students' understanding of the difference between foundational skills, commonly used helping skills and techniques that require specialized training; and (3) Provide students with training experiences that expand conceptual understanding of the counseling process from a multicultural perspective (i.e., from initial intake interviews to integrating assessment information to formulating and carrying out intervention plans to termination).

CPsy 460. Foundations of Counseling Psychology (3)

Knowledge in the core foundations of Counseling Psychology, including the history of Counseling Psychology, multicultural Issues, career and vocational counseling, counseling/psychotherapy process and outcome, ethics, prevention and health promotion, social justice and disaster intervention. Prerequisites: admission to the Ph.D. program in counseling psychology or permission of the counseling psychology program coordinator.

CPsy 461. Assessment of Adult Intellectual Functioning (3)

Administration and interpretation of individual tests/batteries of adult intelligence and neuropsychological functioning. Consideration of psychological and crosscultural issues in intellectual assessment. Preparation of psychological reports. Prerequisite: CPsy 427 and permission of the instructor.

CPsy 462. Assessment of Personality (3)

Consideration of issues and methods of personality assessment, including ethical and legal issues, and crosscultural issues. Practice in the administration of instruments used for personality assessment. Supervised experience and report writing. Prerequisites: CPsy 427 and admission to the Ph.D. program in counseling psychology.

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 470. Independent Study and Research (1-6)

Individual or small group study in the field of counseling. Approved and supervised by the major adviser. *May be repeated for credit.*

CPsy 471 (Educ 471). Diversity and Multicultural Perspectives (3)

Examination of the influence of culture, gender, and disabilities on behavior and attitudes. Historical and current perspectives on race, culture, gender, and minority group issues in education and psychology. Lecture/small group discussion. *Course is restricted to graduate students in the College of Education only.*

***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 473 (SchP 473). Advanced Research Methods in Applied Psychology (1-3)

For doctoral students in applied psychology. Issues and methods of research design, data collection and data analysis. Advanced discussion of quantitative, qualitative and single-case research design. *Admission to the Ph.D. program in counseling psychology or school psychology or permission of the instructor.*

CPSY 476. Supervision and Consultation in Counseling (1-6)

Examination of supervision and consultation theory, research and practice within a multicultural framework. Observation and supervision of counseling practicum students. Consultation in clinical settings. For candidates for supervisor's certificate or doctorate in counseling. Prerequisite: CPsy 480 and permission of instructor.

CPsy 480. Practicum (1-4)

Twenty hours of weekly supervised practicum training for advanced graduate students in individual, group, and family counseling and therapy. *May be repeated for credit. Prerequisites: CPsy 442 and permission of instructor.*

CPsy 481. Advanced Multicultural Counseling (3)

This seminar covers models and theories of multicultural counseling and intervention. Students should be actively engaging in practice with multicultural clients in a practicum or field site, and these cases will form part of the basis of course discussions. *Prerequisites: CPsy 471, admission to the doctoral program in counseling psychology, and permission of the counseling psychology program coordinator.*

CPsy 483. Field Work in Counseling (3-6)

Twenty hours of weekly supervised professional practice in a school or agency setting as an extension of CPsy 480, Practicum. On-site supervision, audio and/or video recordings and case presentations required. *Prerequisites: CPsy 480 and permission of the counseling psychology program coordinator.*

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.

CPsy 485. Advanced Psychopathology (3)

This class will cover etiology, assessment, interviewing techniques, establishing a therapeutic alliance, and treatment planning in adult mental disorders. In depth coverage will be given to Axis II disorders. The diagnosis and classification of abnormal behavior using DSM-IV-R medical model will be emphasized. Alternate theories of abnormal psychology will also be discussed.

CPsy 486. Family Counseling Clinic (3-6)

Supervised practicum training for advanced graduate students in family counseling and therapy. Techniques and methods of conducting family counseling and therapy. *Prerequisites: CPsy 480 and CPsy 440.*

CPsy 487. Advanced Doctoral Practicum I (3)

Supervised clinical experience for entry-level doctoral students with emphasis on the development of intake skills, assessment procedures and intervention skills. Audio and video recording, individual and group supervision. *Prerequisite: admission to the doctoral program in counseling psychology and permission of the counseling psychology practicum coordinator.*

CPsy 488. Advanced Doctoral Practicum II (3)

Supervised clinical experience with emphasis on advanced skills in interpretation, case conceptualization from a theoretical perspective, termination and referral, and in the broad array of professional activities normally conducted by a counseling psychologist. Audio and video recording, individual and group supervision. *Prerequisites: CPsy 487 and permission of the counseling psychology practicum coordinator.*

CPsy 489. Advanced Doctoral Practicum III (1)

Supervised field experience in counseling and therapeutic settings for doctoral students with specific populations. In consultation with on-site supervisor, the student will develop an area of focus for this practicum that will include therapy experience, training and additional assessment skills as needed. *Repeatable for a total of 3 credits. Prerequisites: CPsy 488 and permission of the counseling psychology practicum coordinator.*

CPsy 491. Advanced Doctoral Practicum IV (1)

Supervised field experience in counseling and therapeutic settings for doctoral students with specific populations. In consultation with on-site supervisor, the student will develop an area of focus for this practicum that will include therapy experience, training and additional assessment skills as needed. *Repeatable for a total of 3 credits. Prerequisites: CPsy 489 and permission of the counseling psychology practicum coordinator.*

CPsy 492. Advanced Field Placement (1-3)

Students perform counseling in university and community agencies under the supervision of the Ph.D. psychologists at the field placement. Open only to students in counseling psychology. *Course may be repeated for up to 6 credits. Prerequisites: CPsy 491 and permission of the counseling psychology practicum coordinator.*

CPsy 498. Counseling Psychology Doctoral Internship (1)

A one year full-time or two year half-time supervised internship in professional psychology. Student functions as regular staff member. Regular contact with academic advisor required in addition to end-of-semester evaluation by the internship site and the student. *Repeatable for a total of 3 credits. Prerequisite: CPsy 491 and permission of the counseling psychology program coordinator.*

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 404. The Principalship I (3)

Roles, responsibilities, and operational tasks of principals in the first half of the school year; engagement in practical application of the knowledge, theories, systems, and processes with an emphasis on fall semester responsibilities. Focus on applying the skills and knowledge of the course using problem based learning experiences drawn directly from internship. Must be completed during Principal Internship I

EdL 405. The Principalship II (3)

Roles, responsibilities, and operational tasks of principals in the second half of the school year; engagement in practical application of the knowledge, theories, systems, and processes with an emphasis on budgeting, state testing requirements and closing the school down in the summer. Focus on applying the skills and knowledge of the course using problem-based learning experiences drawn directly from internship. Must be completed during Principal Internship II.

EdL 408. Central Office Internship I (2)

Practical experiences in meeting the challenges inherent in the Superintendent and associated central office positions. Emphasis on the five basic functional office roles of the superintendent: CEO to the school board, human resource manager, instructional leader, financial manager, and director of community relations.

EdL 409. Central Office Internship II (2)

Practical experiences in meeting the challenges inherent in the Superintendent and associated central office positions. Emphasis on the budgeting process, state testing requirements and other priorities in the second half of a school year. Prerequisite: Central Office Internship I.

EdL 414. Principal Internship I (2)

Practical experiences in meeting the challenges inherent in the principal positions during the first half of the school year. Emphasis on data based decision making, instructional leadership, and day to day operations. Must be completed with EDL 404.

EdL 415. Principal Internship II (2)

Practical experiences in meeting the challenges inherent in the principal positions during the second half of the school year. Emphasis on data based decision making, instructional leadership, and day to day operations. Must be completed with EDL 405.

***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 421. Instructional Leadership (3)

Skills, competencies, and best practices of instructional leadership and student achievement. Includes framing and communicating school goals dealing with student learning, supervising and evaluating instructional practices, coordinating the curriculum to student outcomes, monitoring student progress, creating a professional learning community, and engaging in reflective practice as a school leader.

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 423. Leading Inclusive Learning Systems (3)

Issues facing school administrators as they develop and implement plans to address the needs of all students in their schools and districts. Addresses administrators' obligations for the development and monitoring of Individualized Education Programs for children and youth with disabilities as well as other duties encumbered by administrators.

EdL 424. Leadership: Self and Groups (3)

Exploration of the development and practice of leadership with experiential opportunities for application. Formal and informal authority, the practice of leadership, and individual and organizational dynamics are explored to improve the understanding of adaptive work in organizations.

EdL 425. Leading and Managing Change (3)

Practices and theories about reform, change, and decision making look at who you need to communicate with and why each entity needs to be managed differently. Identify the educational stakeholders, the current trends that effect change, and what precipitates the need for change in the educational system. Addresses the process of change as it relates to individuals, the school board, teachers, students, and the administration with special emphasis on leadership, decision-making, motivation, and the dimensions of change.

EdL 426. Introduction to Relational Leadership: Theory and Practice (3)

Theory development relating to individuals and organizations with special emphasis on the superintendents prolonged effective working relationship with the board of education, the administration, the professional and support staffs and the community. Implementation, follow through, and maintenance are emphasized relating to the interpersonal savvy a superintendent needs to effectively establish trust, build and mend relationships, guide decision-making, instill motivation, lead stakeholders and manage change.

EdL 428. Practicum in Supervision of Curriculum and Instruction I (2)

Supervised field experience in all aspects of district-wide curriculum and instructional activities. Requires monthly seminar meetings.

EdL 429. Practicum in Supervision of Curriculum and Instruction II (2)

Advanced supervised field experience in all aspects of district-wide curriculum and instructional activities. Requires monthly seminar meetings. *Prerequisite: EdL 428.*

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 436. School District Governance: Planning Policy, Ethics and Law (3)

Examines federal and state Department of Education policies, laws, and regulations governing educational practice, policy, ethics and programming at the district level. Topics include a study of policy-making and related policies in a district, the role of the educational community in a developing a collaborative decision-making organization, equality of educational opportunity for all students, and how policy efforts are reshaped by federal, state and local systemic reform efforts.

EdL 437. School District Resource Management (3)

Theoretical and practical foundation in school resource allocation from the superintendent district wide perspective. Trends in revenue and expenditures, staffing, and operations, including school board issues, are explored. The economics of education and school business administration are discussed in terms of the policies they affect and create.

EdL 438. Practicum in Supervision of Special Education and Pupil Services Programs I (2)

Supervised field experience in all aspects of district-wide special education programs. Requires monthly seminar meetings.

EdL 439. Practicum in Supervision of Special Education and Pupil Services Programs II (2)

Supervised field experience in all aspects of district-wide special education programs. Requires monthly seminar meetings. *Prerequisite: EdL 438.*

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)

Survey of education practices abroad. Systems of articulation, social and legal foundations, and structure in government. Emphasis on the nature and purpose schools in various cultural contexts and the major problems and trends occurring throughout the world.

EdL 461. Facilitating Organizational Inquiry (2)

Exploration into the use of reflective practice and inquiry for professional development and school improvement. Development of group facilitation skills for collective inquiry. Reflection and inquiry will serve as the foundation for development of an action research project.

EdL 462. Transforming the Learner (2)

Exploration of the integration of social, personal, cognitive, and knowledge-building dimensions to support learning and literacy. Focusing on the metacognitive conversations with self and others essential for developing learning and leadership.

EdL 463. Designing Systems of Action (3)

Implementation of action research project. Building understanding of how the project impacts and is influenced by school and community systems. Explores the application of learning theory as related to leadership. Continued development of leadership concept and tools.

EdL 464. Sustaining Learning Communities (2)

Completion of action research. Design and facilitation of a symposium of inquiry results. Review the behaviors of leadership that sustain learning in the classroom, school, and community.

***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.*

EdL 468. Applied Learning Theory for School Leadership (3)

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 476. School Resources Management (3)

Theoretical and practical foundation in school resource allocation. Trends in revenue and expenditures, staffing, and operations are explored. The economics of education and school business administration are discussed in terms of the policies they affect and create.

EdL 477. Seminar in School-Community Relations (3)

Analysis and development of the communication and public relations skills needed by educators in dealing with the public.

EdL 479. School Law and Ethics (3)

Examination of legal and ethical issues in effective leadership in the public schools, including awareness, analysis and applications of judicial interpretations of the constitutions, statutes, regulations, and common law relating to educational issues.

***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.*

EdL 485. The Superintendency (3)

A theoretical and historical examination of superintendents' leadership, school board/superintendent relations, and the array of duties and demands upon the superintendency.

EdL 488. Program Evaluation (3)

The historical background, theory, methodology, and current practices of program evaluation in the human services area. Emphasis on conducting evaluations of educational programs and gathering data to make effective program decisions. Participants are required to design a program evaluation research plan.

EdL 489. Doctoral Seminar in School Administration (3)

Analysis of the theoretical, empirical, and conceptual aspects of contemporary issues in educational administration and their implications for policy formulation and implementation in educational institutions. *Prerequisite: official standing as a doctoral student in educational leadership.*

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 406. Research Methods and Design (3)

This course is designed to provide skills in the use and application of research methodologies and in the conceptualizing and writing of research proposals. Specifically, the course is focused on developing conceptual knowledge of specific research methods, interpreting data using specific methods of analysis, and developing independent research skills focused around one's own research project. The course is primarily designed for doctoral students in School Psychology and Special Education. *Permission of instructor is required.*

SchP 407 (CPsy 407). Crisis Management in the Schools (3)

This course is designed to provide students with knowledge and skills related to crisis preparedness and intervention in the schools. Relevant theories and research literature will be explored as well as practical elements of crisis response that are applicable to all school systems. In addition, intervention strategies and protocols will be examined and discussed. *Permission of instructor is required.*

SchP 408 Dissertation Proposal Seminar (3)

The primary purpose of this course is to guide students in their independent research endeavors. Students will learn about the complexities of planning and initiating independent research, focusing on the writing process, methodological issues, and the management of time and data. Knowledge and competencies obtained in this seminar will be applied as students prepare their dissertation proposals.

SchP 412. Consultation Procedures (2)

Observational methodology utilized in consultation; rationale, theory and methods of consultation; individual, group and parent consulting. Study of research on the consultation process. *Students must also register for one credit of SchP 431.*

SchP 422. Assessment of Intelligence (3)

Administration and interpretation of individual tests of intelligence used in school evaluation and preparation of psychological reports. *Prerequisite: permission of instructor.*

SchP 423. Behavioral Assessment (3)

Techniques of behavioral assessment including direct observation, interviews, checklists, rating scales, self-monitoring and role-play tests. *Prerequisite: permission of instructor.*

SchP 425. Assessment and Intervention in Educational Consultation (3)

Collection and use of data in designing classroom interventions. Curriculum based assessment, direct behavioral assessment, and structured interviews, and the interrelationship with diagnoses are emphasized within the behavioral consultation model. Utilization of data from actual case studies. *Prerequisites: SchP 402, SchP 423.*

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). Standardized Tests, Measurement and Appraisal (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 summer only.*

SchP 429. Special Topics in School Psychology (with subtitle) (1-3)

SchP 431. Practicum in Consultation Procedures (1-3)

Supervised experience in conducting school-based consultations. *Co-requisite: SchP 412.*

SchP 432. Practicum in Assessment of Intelligence (1-3)

Supervised experience in the administration and interpretation of intelligence tests. *Co-requisite: SchP 422.*

SchP 433. Practicum in Behavioral Assessment (1-3)

Supervised experience in conducting behavioral assessments in school settings. *Co-requisite: SchP 423.*

SchP 434 (SpEd 434). Applied Research Practicum (1-3)

Designing and conducting research projects in applied settings.

SchP 435. Practicum in Assessment & Intervention in Educational Consultation (1-3)

Supervised experience in conducting curriculum-based assessments and designing intervention strategies for educational problems. *Co-requisite: SchP 425.*

SchP 436. Specialized Practicum in School Psychology (with subtitle) (1-3)

Supervised field experience in school psychology with a specific population or setting. *May be repeated for credit. Permission of instructor required.*

SchP 437. Advanced Child Psychopathology (3)

Advanced training in the definition, classification, etiology, long-term outcome, and treatment of children and adolescents with various psychopathological disorders. Emphasis is placed upon the assessment and treatment of child and adolescent psychopathology in school settings. *Prerequisites: admission to doctoral program or by permission of instructor.*

SchP 438. Health/Pediatric Psychology (3)

Introduction to training in the definition, etiology and behavioral/academic characteristics of children and adolescents with medical disorders. Emphasis is placed on the assessment and treatment of educational and behavioral sequelae of medical disorders in both school and health settings. *Prerequisites: admission to doctoral program in school psychology or permission of instructor.*

SchP 439. Comprehensive School Health Programs (3)

Examination of school-wide programs designed to address health care needs of children and adolescents in school settings. Focus is on development of primary prevention and integration of educational, medical, social and community resources. *Permission of instructor required.*

SchP 440. Applications of Pediatric School Psychology (3)

Focus on further development of students' knowledge and application of pediatric school psychology. The etiology and developmental course of pediatric medical conditions will be examined, emphasizing the impact on school, family and community environments. *Prerequisite: SchP 438 or SchP 439 or permission of instructor.*

SchP 442. Doctoral Practicum in School Psychology (1-6)

Field-based experience in providing psychological services in school and/or clinical settings. *May be repeated for credit. Prerequisite: admission to doctoral program.*

SchP 443. Certification Internship (1-6)

Full-time experience in clinical/educational settings. Student must complete a minimum of 1,200 clock hours under joint supervision of faculty and field supervisor. *May be repeated for credit.*

SchP 444. Doctoral Internship (1-6)

Full-time experience in clinical/educational settings. Student must complete a minimum of 1,500 clock hours under joint supervision of faculty and field supervisor. *May be repeated for credit.*

SchP 473 (CPsy 473). Advanced Research Methods in Applied Psychology (1-3)

For doctoral students in applied psychology. Issues and methods of research design, data collection and data analysis. Advanced discussion of quantitative, qualitative and single-case research design. *Admission to the Ph.D. program in counseling psychology or school psychology or permission of the instructor.*

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.

SchP 496. Doctoral Seminar in School Psychology (with subtitle) (3)

Selected topics in school psychology (titles will vary) including professional issues, assessment and intervention in school settings, and supervision of school psychology services. *May be repeated for credit. Prerequisite: admission to doctoral program.*

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 for Individuals with Special Needs (3)

Legal, educational and social issues related to the special education of individuals with mental retardation, physical disabilities, emotional/behavioral disorders, learning disabilities, visual and hearing impairments, health impairments and those who are intellectually gifted. Emphasis will be on meeting the diverse needs of students in general education classrooms and settings.

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 418. Life Skills and Transition Strategies (3)

Curriculum and methods for teaching skills of daily living and preparing students with disabilities for transition to adult living. Includes vocational training, community skills, home and daily living, self-care, leisure, communication and functional academics. Emphasis on transition planning for students with physical disabilities, emotional disturbance, learning disabilities, developmental disabilities, traumatic brain injury, autism, severe disabilities and related challenges.

SpEd 419. Academic and Curricular Strategies for Individuals with Disabilities (3)

Methods course designed to increase knowledge of instruction of reading, language arts, mathematics and content area skills. Emphasis on instructional design and strategies, evaluation of commercial textbooks and possible modifications needed for use with individuals with disabilities.

SpEd 420. Intern Teaching: Certification (2-3)

Competency-based practice in application of procedures for teaching a broad spectrum of individuals with special needs in preparation for Level I Certification as a Teacher of the Mentally or Physically Handicapped. *Prerequisite: consent of program coordinator one semester before registering for this course.*

SpEd 428. Positive Behavior Support (3)

The design of comprehensive, multicomponent behavior support plans for individuals with disabilities who engage in challenging behaviors. Topics include functional assessment strategies, antecedent and setting event interventions, alternative skill training, consequence strategies, lifestyle interventions and teaming strategies. Taught from a noncategorical perspective. *Prerequisite: SpEd 402 or permission of the instructor.*

SpEd 429. Professional Seminar (3)

Master's seminar on current issues in the area of special education and research design. *Prerequisite is 18 graduate credits in special education.*

SpEd 430. Advanced Seminar in Special Education (3)

Advanced issues relating to the field of special education. Titles will vary.

SpEd 434 (SchP 434). Applied Research Practicum (1-3)

Designing and conducting research projects in applied settings.

SpEd 440. Early Academic Intervention (3)

Explores the potential effectiveness of interventions to prevent academic failure of children at risk for learning difficulties. Emphasis on research-based interventions in the areas of beginning reading, language and vocabulary, writing and spelling, awareness of print and exposure to print, and mathematics (number sense).

SpEd 442. Learning Disabilities: Inclusion and Issues (3)

Explores major topics, issues, and trends in the area of learning disabilities. An overview of historical foundations of learning disabilities, theoretical perspectives and medical aspects, definition, etiology, characteristics, assessment, service delivery models, educational approaches, and instructional design. Emphasis on inclusion strategies for adjusting and adapting to the mainstream settings in preschool, school, and post school environments.

SpEd 444. Classroom Management (3)

Introduction to positive behavior support strategies to improve student behavior. Topics include school-wide and class-wide interventions and functional assessment to develop individualized behavior support plans. *Prerequisite: enrollment in special education program.*

SpEd 446. Practicum/Seminar in Academic Interventions (3)

Supervised field work with emphasis on designing and implementing academic interventions. Emphasis on collaboration with general education teachers and parents. Requires one-hour monthly seminar meetings. *This course is restricted to students enrolled in the Academic Intervention Specialist program.*

SpEd 448. Practicum/Seminar in Positive Behavior Specialist 1 (3)

Introductory supervised field work with emphasis on conducting functional assessments, designing positive behavior support plans, and teaming with families and professionals. Requires one-hour weekly meetings with faculty and other practicum students. *This course is restricted to students enrolled in the Positive Behavior Specialist program.*

SpEd 450. Practicum/Seminar in Positive Behavior Specialist 2 (3)

Advanced field work with emphasis on resolving difficult case problems in positive behavior support. Requires one-hour weekly meetings with faculty and other practicum students. *This course is restricted to students enrolled in the Positive Behavior Specialist program.*

SpEd 452. Assessment and Planning for Individuals with Disabilities (3)

Educational assessment procedures for individuals with special needs. Understanding and applying formal and informal assessments. Emphasis on curriculum-based assessment for placement and monitoring student progress in instructional materials. Translating assessment information to develop an individualized instructional plan for a student with a disability.

SpEd 465. Advanced Methods for Inclusion (3)

Advanced techniques for educating students with disabilities in general education based on current research and practice. Accommodations and planning for physical inclusion. Instructional inclusion through embedded instruction, adaptations, and curriculum overlapping. Decision hierarchies for level of instructional adaptation. Social inclusion methods through methods of social facilitation. Taught from a noncategorical perspective and addresses students with all levels of disability (e.g., mild and severe). *Prerequisite: SpEd 332, admission to the special education program, or permission of instructor.*

SpEd 490. Doctoral Seminar in Special Education (3)

Advanced knowledge of issues and research in the education of individuals with special needs. Topics will vary. *May be repeated for credit. Prerequisite: admitted for doctoral studies.*

Teaching, Learning and Technology**LST 401. Overview of Learning Sciences and Technology (3)**

Foundations and key concepts in Learning Sciences and Technology. Cognition and brain-based research with a focus on technology's role in learning.

LST 403. Designing Learning Environments (3)

Social, cognitive, and physical factors in teaching and learning. Systems theory applied to learning settings. Special emphasis on motivational theories. *Prerequisite: LST 401 or permission of instructor.*

LST 420. Critical Reading and Writing (3)

Using literature to build persuasive written arguments. Searching and identifying promising sources, distilling research findings, synthesizing literature to support an argument, and organizing written materials to enhance persuasiveness. Suited to those writing qualifying projects, dissertation proposals, dissertations, funding proposals, conference proposals, and journal articles.

TLT 312. Classroom Practice (1-3)

Experience in elementary and secondary classrooms as related to theories of child and adolescent development, classroom didactics, and philosophies of education. Problem-centered discussion and observations. May be repeated for credit. *Prerequisite: consent of the program director.*

TLT 314. Seminar in Elementary and Secondary Education (3)

Critical analysis and discussion of classroom instructional practices based on experiences of participants as they engage in teaching experiences. *Prerequisite: consent of the program director.*

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) (currently Educ 491)

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 391. Workshops (1-3)

Cooperative study of current educational problems. Provides elementary, secondary, and special education teachers an opportunity to work at their own teaching levels and in their own fields. Limited to six credits during a summer session but the student may register for more than one workshop provided there is no duplication in subject matter.

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 405. Introduction to Testing and Evaluation (3)

Construction and evaluation of the teacher-made test. Selection of published tests and interpretation of individual and group results. Use and misuse of tests in assessing achievement.

TLT 406. Tools for Teaching and Learning (3)

Application of technology in school-based instructional settings. This course addresses the use of technology tools and resources to enhance and manage learning. Students will demonstrate skills in design and development of Web sites, evaluation and use of educational software, production and integration of digital media, and other key competencies.

TLT 407. Designing for Teaching and Learning (3)

Theoretical, philosophical and curricular foundations of instruction. This course explores theories of learning and their application, implications for the use of technology, and standards-based education. Special emphasis on planning, developing and assessing instruction. *Prerequisite: successful prior completion of TLT 406.*

TLT 408. Development, Classroom Management and Assessment: Elementary (3)

Classroom strategies and techniques to provide an effective elementary classroom setting are highlighted. Emphasis on classroom organization to facilitate instruction, establishing rules and procedures, and conducting formative and summative assessments in elementary classrooms.

TLT 409. Development, Classroom Management and Assessment: Secondary (3)

Classroom strategies and techniques to provide an effective secondary classroom setting are highlighted. Emphasis on classroom organization to facilitate instruction, establishing rules and procedures, and conducting formative and summative assessments in secondary classrooms.

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 412. Social Studies in Elementary Education (3)

Elementary curriculum, content, teaching strategies, and instructional materials of the social studies field. Emphasis on organizing content, using appropriate methods, testing and evaluation, and innovations for social studies at the elementary level. Examines textbooks, courses of study, and teacher-made materials.

TLT 420. Reading in Elementary Education (3)

Principles of teaching reading in elementary schools. Selection of appropriate materials, methods, and techniques. Beginning reading instruction and the development of strategies for teaching vocabulary and comprehension in narrative and expository texts.

TLT 422. Language Arts in Elementary Education (3)

Principles of language learning and the development of communication skills in elementary schools. Methods of teaching listening, speaking, handwriting, spelling, punctuation, and grammar. Selection of appropriate materials and textbooks.

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 426. Science in Elementary Education (3)

Principles of the elementary science program. Demonstrations and discussions of appropriate materials and techniques for teaching science concepts to elementary school students. Enrollment limited to available lab space.

TLT 428. Mathematics in Elementary Education (3)

Mathematical skills and concepts for the elementary school program. Sets, systems of numeration, experience with numbers, operations with numbers, number concepts and numerals, and elements of geometry.

TLT 430. Programs for Gifted and Talented (3)

Characteristics of gifted children; teaching gifted children; programs for the gifted in elementary and secondary schools.

TLT 431. Social Studies in Middle Level and High School Education (3)

Secondary curriculum, content, teaching strategies, and instructional materials for the social studies field. Emphasis on organizing content, using appropriate methods, testing and evaluation, and innovations for social studies at the secondary level. Explores textbooks, courses of study, and teacher-made materials.

TLT 432. Reading and Critical Thinking in Middle Level and High School Education (3)

Focuses on expository reading development in content areas such as language arts, mathematics, science and social studies. Practical teaching strategies in critical areas, such as comprehension and study skills. Review of research and methods for improving the reading development of students.

TLT 434. English in Middle Level and High School Education (3)

Curricula, philosophy, methods, strategies, and materials in the teaching of English. Literature, genres, and the nature of text and text differences. Critical analysis and drawing inferences from narrative text and poetry. Applications of technology and assessment principles.

TLT 436. Science in Middle Level and High School Education (3)

Curricula, philosophy, methodology, strategies and safety in the teaching of middle and high school science. Emphasis on laboratory and instructional technology, at-risk and underrepresented students and current models of science education. *Permission of the instructor. Enrollment limited to available lab space.*

TLT 438. Mathematics in Middle Level and High School Education (3)

Curricula, instructional activities, and manipulative aids applicable to mathematics courses in middle level and high schools. Teaching strategies and materials appropriate for teaching mathematics will be emphasized.

TLT 440. Pre-professional Seminar (3)

Study, directed observation of, and initial practice in the various phases of teaching in a laboratory-demonstration school or in area elementary and secondary schools. *Prerequisite: consent of the program director.*

TLT 442. Intern Teaching (2-3)

Intensive practice in the application of principles of teaching. Supervision is provided by the cooperating school and by the university. *Prerequisite: consent of the program director.*

TLT 444. Intern Teaching Seminar (3)

Critical analysis and discussion of classroom instructional practices. Discussion and illustration based on experience of participants as they engage in intern teaching. *Prerequisite: consent of the program director.*

TLT 450. Technology in School Settings: (with subtitle) (1-3)

Focused examination of problems, key issues, and approaches to the use of technology in school settings. Topics will vary (for example, Technology's Role in Facilitating School Restructuring; Teaching for Brain-based Learning; Enhancing Gifted Education Through Technology). *May be repeated for credit as topic varies.*

TLT 452. The Systematic Design of Instruction (3)

Introductory exploration of instructional design models and philosophies and their implications for teaching and learning using technology. Heavy focus on instructional message design. Applies perception theory, communication theory, and learning theory to the design of instructional media. Students in this course design instructional materials employing the theories and guidelines explored. *Pre/co-requisite: LST 401.*

TLT 454. Applied Instructional and Interface Design Principles (3)

Exploration and application of design models for learning. Special emphasis on graphical user interfaces in education and training. *Prerequisite: TLT 452.*

TLT 456. Advanced Instructional Design (3)

Advanced instructional design and interface issues. Design of instructional environments, selection of instructional metaphors, impact of the interface on the user, and demands of designing for newer learning technologies. *Prerequisite: TLT 454.*

TLT 458. Website and Resource Development for Learning (3)

Introduction to resource development and HTML editing tools used in the creation of eLearning Websites. Covers fundamentals of: HTML and commercial Web-creation software packages; scanners and digital video cameras; and use of digital resource creation-and-manipulation programs. *Prerequisite: TLT 406 or permission of instructor.*

TLT 460. Interactive Multimedia Programming for Learning (3)

Introduction to creating educational applications utilizing sound, video, graphics and other digital resources. *Prerequisite: TLT 458.*

TLT 462. Advanced Development of Instructional Resources and Technologies: (subtitle) (3)

Focus on using more sophisticated 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 Hand-held Devices; Audio Resource Development; Media Production for Instructional Programming). *May be repeated for credit under different topic. Prerequisite: TLT 460.*

TLT 470. Integrating Technology in the Classroom (3)

Planning for integration of instructional technology in individual classrooms. Analysis of available technologies, both hardware and software, and identification of technologies matched to instructional needs. Focus on assessing the impact of technology on student outcomes.

TLT 471. Planning for Implementing Technology at the School or District Level (3)

Logistics of implementing technology for a school or school district. Covers staffing, budgeting, facilities, staff development, and proposal preparation. Students in the course create complete technology plans.

TLT 474. Budgeting, Maintaining, and Evaluating Technology (3)

Generating budgets for technology implementation, planning for maintenance and continuity in technology services, evaluating the effectiveness and impact of technology implementations.

TLT 476. Technology Program Evaluation (3)

Techniques for evaluating technology implementations. Focus on instrumentation, data collection and analysis, drawing conclusions from data sets, and preparing reports for funders.

TLT 480. Curricular Design and Innovation (3)

Curricular models and their features, with a focus on how curricular design promotes learning in K-12 settings. Special emphasis on technology-enabled curricula, designing for brain-based learning, and curriculum's role in innovation.

TLT 492. Classroom Research Methods (3)

Introduces students to classroom research design paradigms and the assumptions behind them, use of the literature, developing research questions, qualitative and quantitative procedures, research design, sampling design, data collection, data analysis, and reporting research results using educational applications.

TLT 494. Culminating Research Project (3)

Designing and conducting research projects in classroom settings.