**Education and Human Services**

The Department of Education and Human Services (EHS) includes five academic programs:

- Counseling Psychology,
- Educational Leadership,
- School Psychology,
- Special Education, and
- Teaching, Learning, and Technology

Although the EHS department does not offer an undergraduate major, the Teaching, Learning, and Technology program offers an Education minor, as well as a five-year program leading to a master's degree and certification in a teaching field. Across the five academic programs, the department offers a variety of master's degrees (M.Ed., M.S., and M.A.) and doctoral degrees (Ph.D. and Ed.D.), as well as an Educational Specialist degree (Ed.S.). In addition, in cooperation with the College of Business, the department offers a combination MBA/M.Ed. degree. Further, programs in the college offer coursework-only study toward Pennsylvania state certification, without having to earn a degree. Lastly, there are numerous non-degree programs of study in the college leading to a Lehigh University post-bachelor's certificate.

Programs of study vary in the number of credits required for completion. Please consult the appropriate academic program to learn more about those requirements.

**Courses**

**EDUC 375 (CGH 375, HMS 375) Community Based Participatory Research Methodology 3-4 Credits**

The course provides an introduction to the core concepts of community based participatory research (CBPR) methodology applied to social science research to address public health issues. The course will equip students with strategies for developing community academic partnerships as well as to strengthen skills in research methods.

**Attribute/Distribution:** SS

Lehigh University 2022-23
EDUC 407 Grant Writing and Fund Raising in Education 3 Credits
This course provides a comprehensive overview of the grant writing process. All aspects of grant preparation and writing will be reviewed, including preparing to write a grant, identifying funding sources, developing a grant idea, preparing a proposal, determining appropriate funding agencies, and evaluating grant quality.

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

EDUC 409 Analysis of Experimental Data 3 Credits
Emphasis on analysis of variance designs including one-way, factorial, nested, and repeated measures designs. Introduction to multiple regression and the analysis of covariance.
Prerequisites: EDUC 408

EDUC 410 Univariate Statistical Models 3 Credits
The univariate general linear model. Principles of expressing models and hypotheses about those models. Emphasis on similarity among the analysis of variance, multiple regression, and the analysis of covariance. Examples of nonstandard models and generalization to complex designs.
Prerequisites: EDUC 409

EDUC 411 Multivariate Statistical Models 3 Credits
The multivariate general linear model. Principles of expressing multivariate models and hypotheses about those models. Emphasis on similarity among the multivariate analysis of variance, multiple regression, and the analysis of covariance. Examples of non-standard models and generalization to complex designs.
Prerequisites: EDUC 410

EDUC 412 Advanced Applications of Psychometric Principles 3 Credits
Conceptual examination of exploratory and confirmatory factor analysis, cluster analysis, latent-trait modeling, and other advanced psychometric topics.
Prerequisites: EDUC 409 or EDUC 410 or EDUC 411 or SCHP 427 or CPSY 427

EDUC 413 Hierarchical Linear Modeling 3 Credits
This course is designed to introduce students to the theoretical underpinnings and basic applications of hierarchical linear modeling (HLM). At the end of the course, students will understand when HLM is the appropriate analysis of choice as well as be able to analyze multilevel data. Both cross-sectional and longitudinal nestedness will be considered. An understanding of regression analyses is essential for success in this course and is a prerequisite to this class.
Prerequisites: EDUC 410 or EDUC 411

EDUC 414 Structural Equation Modeling 3 Credits
Analysis and interpretation of a variety of structural equation modeling (SEM) procedures including path analysis, confirmatory factor analysis, factorial invariance, full structural equation models, and latent growth models. Understanding and critiquing both theoretical and applied literature relevant to SEM.
Prerequisites: EDUC 410 or EDUC 411

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

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

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

EDUC 423 Curriculum and Materials Design for English Language Learners 3 Credits
Design of curricula and materials to meet the needs of English language learners (ELLs). This course will guide students through the process of creating, adapting, and differentiating materials used in everyday teaching, while also giving students tools to develop curricula for their districts and schools. Students will engage in design and adaptation at many levels from curricula and courses, to assessments, lesson plans, and tasks.

EDUC 424 Practicum in Second Language Teaching 1-3 Credits
Culminating course for students pursuing the ESL Program Specialist Certificate. Throughout the practicum, students will apply the knowledge they have gained about ELL education, theory, and practice to teaching and supporting ELLs in K-12 classrooms. As they teach, students will enhance their professional expertise by evaluating, problematizing and reflecting on their praxis. In doing so, this practicum emphasizes teacher agency and the professional skills needed for self-directed, on-going growth as an ESL practitioner.

EDUC 431 Multi-Tiered Systems of Social-Emotional Support I: Foundations 1 Credit
This course provides an overview of multi-tiered systems of support (MTSS), a tiered framework that offers comprehensive emotional, social, and behavioral support to all students. The rationale for MTSS and data collection and evaluation will be discussed, with a focus on how academic and behavioral progress monitoring data can support educational practice.

EDUC 432 Multi-Tiered Systems of Social-Emotional Support II: Universal Approaches 1 Credit
This module describes implementation of multi-tiered systems of support (MTSS) with an emphasis on social-emotional learning (SEL). The module will provide an overview of Tier 1 evidence-based SEL programs and illustrate how they can be implemented within a MTSS framework.
Prerequisites: EDUC 431
Can be taken Concurrently: EDUC 431

EDUC 433 Multi-Tiered Systems of Social-Emotional Support III: Targeted Approaches 1 Credit
This module describes the rationale for implementing more targeted interventions, at the Tier 2 and 3 levels, to address the continuum of students' behavioral needs, within a multi-tiered system of support (MTSS). This module will provide an overview of the common mental health concerns that PreK-12 students experience, and school personnel will learn how to integrate and correctly apply the DSM-5 and IDEA in order to make the best possible educational and mental health decisions for children and their families.
Prerequisites: EDUC 431 and EDUC 432
Can be taken Concurrently: EDUC 431, EDUC 432
### EDUC 434 Prevention and Management of Crisis 1 Credit
This course is designed to introduce school personnel to crisis response in school settings, focusing on best prevention, intervention, and follow-up practices. School personnel will learn prevention strategies, discuss the considerations in building a crisis response team and learn crisis response methods, including methods of individual and group crisis counseling. Specific crises considered will include suicide, death of a teacher, student, parent, or community member, and school violence.

### EDUC 435 Implementation for Equity: Leading Student-Centered Schools 1 Credit
This module is designed to develop school personnel’s knowledge about how to organize and implement initiatives that support a student’s social, emotional, and behavioral wellness. With an emphasis on implementation and operation, school personnel will focus on inter-system collaboration among community partners to address student social, emotional, and behavioral needs through the implementation of equitable SEL programs and practices. Finally, school personnel will discuss the protections associated with confidentiality.

### EDUC 436 Implementation for Equity: Social Emotional Learning in Action 1 Credit
This module is focused on application of social-emotional theories and practices to create equitable learning environments. This course will engage school personnel in identifying one or more inequities within the school context and developing a culturally responsive plan to remediate these inequities. Considering organizational readiness, school personnel will focus on inter-system collaboration among family, school, and community partners to assess and address student social, emotional, and behavioral needs, as well as learn skills to engage youth in decision-making processes.

**Prerequisites:** EDUC 406

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

### EDUC 456 Trauma and Resilience in Schools 3 Credits
This course is designed to provide educators and mental health trainees with a comprehensive exploration of psychological trauma and resilience; including the history and current theories in the field; the nature of trauma; how trauma and loss affects individuals and systems; grief reactions; learning and behavior and traumatic stress; and the development of trauma-responsive schools. Cultural-sensitivity, survivor-centeredness, and social justice efforts are emphasized within a trauma-informed care approach to prevention and practice.

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

### EDUC 471 Diversity and Multicultural Perspectives 3 Credits
Examination of the influence of culture, gender, and disabilities on behavior and attitudes. Historical and current perspectives on race, culture, gender, sexual orientation, gender identity diversity, and minority group issues in education and psychology. Lecture/small group discussion. This course is restricted to graduate students in the College of Education.

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

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

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

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

**Repeat Status:** Course may be repeated.

### EDUC 486 Doctoral Qualifying Research Project 1-3 Credits
Design and implement research project under faculty supervision to meet requirements for doctoral programs.

**Repeat Status:** Course may be repeated.

### EDUC 490 Thesis 1-6 Credits

### EDUC 491 Advanced Seminars: (with subtitle) 1-6 Credits
Intensive study and discussion of a specialized area. Title will vary.

**Repeat Status:** Course may be repeated.

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

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

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

**Repeat Status:** Course may be repeated.

### EDUC 496 Doctoral Research Seminar 3 Credits
For doctoral students. Research design and application to various kinds of educational problems; data collection and analysis. Criticism and evaluation of student proposals.

**Repeat Status:** Course may be repeated.

### EDUC 499 Dissertation 1-15 Credits