



College of Education

Education Studies and Human Relations

education.uiowa.edu/eshr

ESHR: Cognition, Learning, and Development Informal Concentration Area (ICA)

Understanding how children and adolescents learn and develop can help change lives and is valuable in many settings and a variety of careers. Courses in the *Cognition, Learning, and Development ICA* will help you understand the process of learning and helping and how to engage with different populations in their development of knowledge, skills, and abilities.

The *Cognition, Learning and Development ICA* pairs well with all other ICAs but best supports the content in *Learning, Design, and Media*; *Experiential Informal Learning*, and *Trauma-Informed Advocacy*; and *Couple and Family*.

Major, Minor, and Certificate Suggestions

Majors/Minors

[Business Administration](#)

[Health Studies](#)

[International Relations](#)

[Management](#)

[Psychology](#)

[Public Health](#)

[Sociology](#)

Certificates

[Critical Cultural Competence](#)

[Leadership Studies](#)

[Nonprofit Leadership and Philanthropy](#)

[Leadership](#)

[Social Science Analytics](#)

[Writing](#)

With this focus in ESHR, students will be well-positioned for doctoral programs in Counselor Education, School Psychology, Learning Sciences, Educational Psychology, or Higher Education and Student Affairs.

Focusing on cognition, learning, and development in the ESHR program supports students in several career areas within education settings outside public schools, such as public health environments, private educational settings, or nonprofit leadership. It may also lead to non-teaching careers that include helping people learn, such as leadership programs, academic administration, instructional design for corporate training, or curriculum and textbook development for educational publishing.

Course suggestions

(Students are encouraged to take one or two courses from each skill/content area.)

Understanding Learning and Cognition

EDTL:2630 Introduction to the Psychology of Music

Processes by which people perceive, respond to, create, and use music in their daily lives; basic physics of musical stimuli, psychoacoustics of musical perception, principles of musical cognition, neurological and physiological responses to music, theories of musical learning and development, and social psychology of musical activity; previous musical performing experience helpful but not required. GE: Social Sciences

EDTL:3382 Language and Learning

How language reflects and constructs learners' identities and cultures; readings related to oral and written language, native and second language development, linguistic diversity; discussion of the relationship of language theory to schools of language instruction. English majors and English and Creative Writing majors may apply this course to the following area and/or period requirement. AREA: Literary Theory and Interdisciplinary Studies. Same as ENGL:3190

EDTL:4093 Teaching & Learning w/Global Perspectives

Examination of conceptualizations and themes, along with theories, strategies, and resources that can inform teaching and learning for global competence education in all disciplines; teaching for prejudice reduction and education for informed and responsible global citizenship; creation of a standards-based curriculum project; designed for practicing

teachers.

PSQF:2115 Introduction to Counseling Psychology

Historical and philosophical foundations of counseling psychology; theories, application, and work of counseling psychologists. GE: Social Sciences.

PSQF:4204 Introduction to the Learning Sciences

Foundations of interdisciplinary science of learning; theory and method of study of cognition in sociocultural context; design-based approaches to research on learning; history of several key concepts traced to determine origins; how contemporary literature is situated in this intellectual history.

PSQF:4281 Cognitive Principles for How People Learn

We use the word learning to refer to a diversity of experiences. What ideas from cognitive science might help us unify diverse experiences, such as learning to tell time or tie your shoes with experiences such as the disciplinary learning undergraduates must develop in college courses? By enrolling in this course, you will determine the nature of how cognition leads to learning.

Instructional Strategies for Informal Learning Spaces

EDTL:3715 Experiential Teaching and Learning

Introduction to practice of experiential learning and teaching; students create and lead experiential activities in formal and informal learning environments; exploration of factors that impact the value of an experience and assess impact; integration of multiple disciplines and perspectives in a collaborative manner; skills for processing and guiding reflection to determine outcomes of experiences; work collaboratively to design, plan, execute, and determine outcomes of an experience for a target population.

PSQF:4281 Cognitive Principles for How People Learn

Project-based course that introduces the process to formally design, develop, implement, and evaluate instruction in a context of the student's choosing.

PSQF:4750 Learning Environments: Design, Context, and Activity

Students explore the design of learning environments and the kinds of activities that take place there; includes a general background on design of learning environments; emphasis on project- and problem-based learning (considered to be keys to 21st-century learning), media inclusion, and how teacher facilitation/questioning and cooperative learning are foundational for success.

PSQF:4760 Participatory Learning and Media: Creating, Remixing, Making, and Education

Teaching and learning with 21st-century digital media; pedagogical approaches characterized by participatory learning that expands and blurs boundaries of the classroom; remixing educational, social, and entertainment-based media toward pedagogical ends that meet instructional goals; engagement with social media, web-based video, interactive media, podcasts, games, and simulations.

SIED:4110 Environmental Issues of the Colorado Rockies

Basic concepts of physical geology, historical, and environmental geology of the Rocky Mountains in context of mineral exploration, mining, and environment; collection of a teaching suite of basic igneous, sedimentary, and metamorphic rocks and rock forming minerals; scientific/educational photography, field inquiry, and curriculum development projects; students spend 10 days probing the mountains of Colorado for clues to its geologic past including mountains, seas, and volcanic activity; knowledge is tested in the field along with connecting the geology of Colorado with future teaching employment locations.

SIED:4135 Nature of Science

Ideas on understanding and ways of thinking that are essential in a world shaped by science, technology, engineering, and mathematics; focus on increasing science literacy by examining the nature of science; comparison of characteristics specific to individual science disciplines; identification of great episodes and debates in history of science and habits that are essential for science literacy; scope and sequence of content and process skills for K-12 curriculum, instruction, and assessment.

Human Development

EDTL:4900 Foundations of Special Education

Students with disabilities, gifted and talented; strategies for effective treatment, collaboration between regular and special education teachers; remediation of academic, behavioral, social problems.

PSQF:2116 Applied Child and Adolescent Psychology

Overview of child and adolescent development, psychopathology, and basic-level intervention; foundation for working in applied child and adolescent mental health settings; typical areas of psychological difficulty, including developmental disorders, ADHD, depression, anxiety, substance use; contextual and environmental factors, including abuse, poverty, neglect.

PSQF:4106 Child Development

Theories and research findings about typical course of child development, differences in development. Requirements: junior standing.

PSQF:4133 The Adolescent and Young Adult

Psychological and social aspects of adolescence and young adulthood; emphasis on theory, research, and practical applications.

Educational Research & Methods

EPLS:3240 Undergraduate Topics in Education

Research Skills for Public Policy: Being a public policy researcher is like any other profession. There are behaviors, goals, and ways of thinking that are common among researchers. These norms help researchers conduct high-

quality research that has an impact on major societal issues. Students who complete this course will develop foundational knowledge and skills for doing public policy research, including ethical behavior, effective communication, and teamwork.

OR Survey Research and Public Policy: Surveys can be used to produce knowledge that makes an impact on major societal issues. Surveys used to conduct public policy research must be carefully designed, carried out, and evaluated. Understanding how researchers make decisions and what factors they consider will help you evaluate the quality of published survey results. Students who complete this course will develop foundational knowledge and skills for understanding survey research, including questionnaire design and sampling.

PSQF:4143 Introduction to Statistical Methods

Analysis, interpretation of research data; descriptive statistics; introduction to probability, sampling theory, statistical inference (binomial, normal distribution, t-distribution models); linear correlation, regression.

Leadership Skills

CSED:4111 Building Leadership and Success at Work

Learn and apply leadership skills and behaviors to meet and exceed employer expectations; develop skills to evaluate and match interests with company leadership styles; effectively use leadership behaviors to influence, communicate, motivate, work in teams, and manage conflict; gain an understanding of self-identity and how it is used in order to pull all of these skills and behaviors together to create an individualized leadership plan for use in career and personal life.

CSED:4140 Foundations of Leadership

Preparation to become effective employees and leaders; emphasis on leadership roles in clinical and other human service or health care settings; how leadership transcends job title associated with high work performance; experiential activities that illustrate key didactic concepts and didactic lecture review, written assignments, experiential assignment, in-depth discussions illustrating key concepts.

EPLS:4020 Engaging in Civic Dialogues

Students learn the skills and practices that will develop the resilience necessary to engage in challenging civic dialogues about organizational, community, and/or societal change. Students develop leadership skills, cultivate personal stamina, and reflect on how they can be part of a civic society through taking daily actions that engage across differences.

Internship Experiences

While not a part of the 30 credits that contribute to the ESHR major, we encourage students interested in this concentration area to include several internship and practicum experiences in their coursework as they earn their BA. Please visit with the ESHR advisor about how to find and register for these opportunities that may help to customize your experiential informal learning background.

Faculty Liaison

[Stacey McElroy-Heltzel](#), Assistant Professor, Counseling Psychology

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