



College of Education

Education Studies and Human Relations

education.uiowa.edu/eshr

ESHR: Learning, Design, and Media Informal Concentration Area (ICA)

Every second, 1.7 megabytes of data are created for *every person* on Earth. How do people transform and select information so that it may become knowledge that guides their thinking, decision making, problem solving, and understanding? The answer lies in *understanding how people learn*. Our courses in the *Learning, Design, and Media ICA* include a variety of opportunities for you to understand how people learn and use that understanding to design, implement, and evaluate formal and informal learning environments, using an iterative process that includes selecting, using, and creating media when appropriate.

The content studied in *Learning, Design, and Media ICA* will augment how you understand complementary areas of study and position you to distinguish yourself from your peers. The *Learning, Design, and Media ICA* provides an opportunity for the practical application of content gained in other ESHR ICAs such as *Experiential Informal Learning* and *Cognition, Learning, and Development*. Combining our courses with one of the following majors, minors, or certificates will deliver a skill set that prepares you to work at the interface between media and human learning.

Other Major, Minor, Certificate Suggestions

Majors/Minors

[Computer Science](#)
[Geoscience](#)
[Global Health Studies](#)
[Informatics](#)
[Linguistics](#)
[Marketing](#)
[Psychology](#)
[Science Studies](#)

Certificates

[Artificial Intelligence, Modeling and Simulation](#)
[Entrepreneurial Management](#)
[Geographic Information Science](#)
[Museum Studies](#)
[Public Digital Arts](#)
[Social Science Analytics](#)
[Technological Entrepreneurship](#)
[Writing](#)

Career opportunities for individuals with this complementary training include technology firms, educational testing firms, learning companies, K-12 and higher education, healthcare, counseling, business, and not-for-profit organizations. Job titles include human factors engineer, learning and education director, learning strategist, field coach, research and evaluation associate, coordinator of research, director of technology and business development, instructional designer, learning solutions designer, and museum exhibit designer. In addition, students with this focus in ESHR will be positioned for graduate work in a Learning Sciences, Instructional Design, or Educational Psychology program.

The University of Iowa offers a combined U2G program from ESHR to their [Learning Sciences and Educational Psychology MA](#) program. This ICA will help position you to apply for that program. Check with the ESHR advisor during your junior year.

Course Suggestions

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

Learning and Cognition

EDTL:2122 Create, Imagine, Play, Human Dev in Arts

Theories related to human development and visual arts; use of visual arts to make meaning from experience; ways to

integrate visual arts into everyday life; cognitive and physical processes involved in making, understanding, and looking at visual art through studio experiences; theories of cognitive development; role of visual art in education; introduction to art production, history, criticism, and aesthetics.

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.

Designing and Understanding Environments

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.

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 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:4205 Design Principles for How People Learn

Project-based course that introduces the process to formally design, develop, implement, and evaluation 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.

SIED:4110 Environmental Issues of 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

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.

Learning Technologies

EDTL:3002 Teaching and Learning Technologies

Operation and application of computer, video, and audio equipment in schools; evaluation and selection of instructional software, and use of the Internet and other communication tools are examined

EDTL:4987/CSED:4187 Introduction to Assistive Technology

How assistive technology can be used for attainment of goals in education or work.

PSQF:4760 Participatory Learning and Media

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.

Research Skills

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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

[Callie Sung](#), Assistant Professor, Learning Sciences and Educational Psychology

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