

LEARNING SCIENCES (LRN_SCI)

LRN_SCI 201-0 Cognition and Action (1 Unit) Perspectives on thinking and learning; how individuals reason and accomplish tasks, both on their own and in interaction with each other and with their immediate environments.

LRN_SCI 202-0 Culture, Language, & Identity (1 Unit) Social and cultural dimensions of learning, particularly how diverse linguistic and cultural tools mediate forms of identity, learning experiences, and participation in and transformation of social life.

LRN_SCI 214-0 Culture and Cognition (1 Unit) Explore the cultural ground of cognition. How do cultural environments structure and orient our conceptual knowledge, and how do these cognitive processes feedback into cultural systems? Key topics include conceptual development, knowledge organization, causal reasoning, moral psychology, and environmental psychology. Jointly, the topics are integrated through a focus on social and ecological thought. We will engage in cultural artifact analyses, field experiences, and research inquiries. Combined with LOC 214-0; may not receive credit for both courses.

LRN_SCI 224-0 Holocaust Education Design (1 Unit)

LRN_SCI 251-0 Special Topics in Learning Sciences (1 Unit)

LRN_SCI 301-0 Design of Learning Environments (1 Unit) Conceiving, building, and testing products and services to help people learn. Topics include the human-centered design process, principles for designing learning environments, and agile project management and communication techniques.

LRN_SCI 302-0 Social, Cultural, and Linguistic Contexts of Education (1 Unit) This course focuses on the social and contextual influences of education, from a learning, teaching, research, and policy perspective. We will examine the role of race, ethnicity, class, gender, sexuality, and identity in the ways individuals and groups influence and are influenced by our education system.

LRN_SCI 308-0 Redesigning Everyday Organizations (1 Unit) Concepts and methods for understanding and studying cognition and learning and putting these concepts and methods to use in a design/change project. Combined with LOC 308-0; may not receive credit for both courses.

LRN_SCI 309-0 Inclusive Making (1 Unit) The goals of this course are to push students to 1) critically explore Making as a practice that promotes democratization, 2) develop interfaces that allow a broader population of students to participate in digital fabrication and 3) design artifacts that positively impact accessibility and inclusivity. The course will include guest speakers, laboratory portions and a projects that encourages students to develop publishable scholarship and/or functional prototypes, as they work in interdisciplinary teams. This is a hands-on project course. All students will design and implement interactive technologies. For this reason you will be expected to do computer programming and digital fabrication. However, all projects can be completed in teams. Hence, it is not essential that all students come with prior knowledge in computer programming and digital fabrication. Additionally, a portion of class and office hours will be devoted to helping students gain familiarity in basic digital fabrication and computer programming.

LRN_SCI 313-0 Tangible Interaction Design and Learning (1 Unit) Explores the use of tangible interaction to create innovative learning

experiences, including distributed cognition, embodied interaction, cultural forms, and design frameworks. Combined with COMP_SCI 313-0; may not receive credit for both courses. Prerequisite: COMP_SCI 110-0.

LRN_SCI 326-0 Design of Technological Tools for Thinking and Learning (1 Unit) Constructionist approach to design. Participants discuss learning design literature, critique software, and design and build computer-based learning environments (CBLE).

LRN_SCI 338-0 Learning and Teaching with Technology (1 Unit) Theory and practice of designing school environments that integrate new technologies and media. Combined with TEACH_ED 338-0; may not receive credit for both courses.

LRN_SCI 351-0 Topics in Learning Sciences (1 Unit)

LRN_SCI 372-0 Designing and Constructing Models with Multi-agent Languages (1 Unit) Exploration and analysis of multi-agent models, which simulate "emergent" scientific phenomena in a wide variety of content domains. Combined with COMP_SCI 372-0; may not receive credit for both courses.