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.

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 Contexts of Education (1 Unit) Societal structures that organize, supply, and channel individual learning experiences and how they provide the formal and informal settings in which social interaction takes place, particularly in urban settings. How participation in these socializing settings molds the development of individuals’ capacities and forms their goals. Combined with TEACH_ED 302-0; may not receive credit for both courses.

LRN_SCI 304-0 Intro to Schooling in Communities (1 Unit) Action research methods—including observation/field notes, interviewing, and artifact analysis—as means to understanding how schools work and how theory and practice relate. Includes 30 hours of field experience. Combined with TEACH_ED 304-0; may not receive credit for both courses.

LRN_SCI 306-0 Learning with New Media (1 Unit) Examines ways to study and learn from social media spaces and how digital platforms shape presentation of content and information sharing practices.

LRN_SCI 307-0 Designing Interactive Media and Technology for Learning (1 Unit) Building on theory in the learning sciences and a broad set of multimodal technological tools, students develop and test a collection of learning technologies and examine ways to assess the educational impact of their inventions. Prerequisite: EECS 110-0 or permission of instructor.

LRN_SCI 308-0 Cognition in Context (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 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 EECS 313-0; may not receive credit for both courses. Prerequisite: EECS 110-0.

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 EECS 372-0; may not receive credit for both courses.