

# Learning Sciences (LRSC)

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## Courses

### **LRSC 500. Introduction to the Learning Sciences. 4 hours.**

Key principles of learning, development, and language. Cognitive, social, and affective dimensions of learning. Applicability to diverse learners and contexts of learning. Course Information: Prerequisite(s): Admission to the Ph.D. program in Learning Sciences or consent of the instructor.

### **LRSC 501. Research Methods in the Learning Sciences. 4 hours.**

Focuses on understanding the components of research design and scientific arguments as they apply to the diverse research issues investigated in the learning sciences. Course Information: Prerequisite(s): LRSC 500 and admission to the Ph.D. program in the Learning Sciences or consent of the instructor.

### **LRSC 503. Foundations of Scientific Inquiry. 4 hours.**

Explores different meanings attached to the idea of inquiry teaching and learning, including how this varies by the age of the student and academic discipline. Course Information: Prerequisite(s): LRSC 500 and admission to the Ph.D. program in the Learning Sciences or consent of the instructor.

### **LRSC 511. Analysis of Teaching and Learning Interactions. 4 hours.**

Tools and techniques for the capture and analysis of multi-modal interaction among learners, teachers, and environments. Discourse, gesture, media, instrumentation. Course Information: Prerequisite(s): LRSC 500 and LRSC 501 and admission to the Ph.D. program in Learning Sciences; or consent of the instructor.

### **LRSC 512. Design of Learning Environments. 4 hours.**

This course explores design and evaluation of formal and informal learning environments, with respect to learners, knowledge, assessment, and community. Course Information: Prerequisite(s): LRSC 500 and LRSC 501.

### **LRSC 513. Change in Individuals and Organizations: Implementing and Institutionalizing Change for Learning. 4 hours.**

This course examines the relationships between processes of learning and the ways in which organizations can be changed to foster learning in individuals or groups. Course Information: Prerequisite(s): LRSC 500 and LRSC 501.

### **LRSC 540. Learning Sciences Journal Club. 1-4 hours.**

Helps students establish guidelines and criteria by which to judge the efficacy of a research effort as presented in published scholarly literature. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Prerequisite(s): Admission to the Ph.D. program in the Learning Sciences or consent of the instructor.

### **LRSC 590. Research Apprenticeship. 0-16 hours.**

Designed as a supervised research course. Students enroll in for between 2 and 16 hours per semester dependent upon the time they are spending on research projects, supervised by the faculty member with whom they enroll. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Prerequisite(s): LRSC 500 and admission to the Ph.D. program in the Learning Sciences and consent of the faculty member with whom the student enrolls.

### **LRSC 594. Special Topics in Learning Sciences. 4 hours.**

Gives students access to particular areas of theory, research methods, design topics, lines of research, or other areas of current interest in the field of Learning Sciences. Course Information: May be repeated. Recommended Background: Familiarity with Learning Sciences or related fields.

### **LRSC 599. Thesis Research. 0-16 hours.**

Designed for students engaged in research that constitutes the dissertation. Hours of enrollment per semester is dependent upon the stage in of dissertation research. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Prerequisite(s): Advancement to candidacy in the Ph.D. program in the Learning Sciences.