The UIC Graduate College offers an interdisciplinary program of academic work leading to the Doctor of Philosophy in Learning Sciences. This doctoral degree complements and draws on expertise in learning sciences research conducted in several academic departments and degree programs on the campus, including those in Chemistry, Computer Science, Education, Mathematics, Psychology, and others. Consult the appropriate pages in this catalog for information on degree programs in these related disciplines.

Admission and Degree Requirements

- PhD in Learning Sciences

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. 2 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.