

## Graduate College

### LEARNING SCIENCES

Mailing Address:  
1007 West Harrison Street (MC 057)  
Chicago, IL 60607-7137

Campus Location: 2056A Behavioral Sciences Building  
Program Code: 20FS5084PHD  
Telephone: (312) 413-3901  
E-mail: [msoto7@uic.edu](mailto:msoto7@uic.edu)  
Web Site: <http://grad.lsri.uic.edu/>

Dean of the Graduate College: Clark Hulse  
Director of Graduate Studies: Donald Wink

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 chapters in this catalog for information on degree programs in these related disciplines.

### Admission Requirements

Applicants are considered on an individual basis. Transcripts of all undergraduate and any graduate work must be submitted. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements:

#### Doctor of Philosophy

- **Baccalaureate Field** No restrictions.
- **Master's Degree** Optional.
- **Grade Point Average** At least 3.25/4.00 (or 4.25/5.00) for the final 60 semester (90 quarter) hours of baccalaureate study and for all postbaccalaureate course work.
- **Tests Required** GRE.
- **Minimum TOEFL Score** 550 (paper-based); 213 (computer-based); 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21 (new Internet-based TOEFL).
- **Letters of Recommendation** Three required; attesting to potential for success in rigorous doctoral program in Learning Sciences.
- **Personal Statement** Required. Statement must identify and explain applicant's career objectives and qualifications for pursuing a doctoral degree in Learning Sciences. Statement must also specify an area of specialization (i.e., a field or discipline in which the applicant intends to pursue the study of learning), and an explanation of the applicant's experience and background in that area. Personal statement must be 3 to 5 pages in length, typed, double-spaced.
- **Deadlines** The fellowship/priority application deadline is January 1. March 15 is the preferred application deadline and the extended application deadline is May 15. Admission is restricted to the fall term.

### Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

#### Doctor of Philosophy

- **Minimum Semester Hours Required** 96. For applicants holding a master's degree, the admissions process includes an evaluation of the applicant's record, desired specialization, and a decision regarding any modifications to the Learning Sciences program requirements.
- **Course Work Required Courses:** LRSC 500, 501, 502, 503, 511, 512, 513, 540, 590, and 599.
- **Examinations** Students will be required to submit an annual review,\* following a template provided by the Learning Sciences program, to show evidence of academic and professional progress. Required courses specify examination requirements.
- **Comprehensive Qualifying Examination:** Required portfolio examination. From each core course, students generate at least one product or document that contributes to the portfolio. The student may also include such products from specialization and elective courses. In addition, evidence of research and inquiry activity is to be included in the portfolio. Upon completion of the core courses or the required portfolio items the student will orally defend the contents of the portfolio before a committee of LS faculty who will determine passing or failing of the comprehensive exam.
- **Preliminary Examination:** Required. The preliminary exam is an oral defense of the completed dissertation proposal and is taken after successful completion of the comprehensive qualifying exam. The primary purpose of the preliminary examination is review and approval of the thesis research proposal and admission of the student to the dissertation research stage of degree candidacy.
- **Thesis Research** Required. The completed thesis research must be defended orally and publicly before a thesis committee.

\*Annual Review Required: *While it is not, strictly considered, an examination, an annual student assessment will constitute the first step in a two-step student assessment process, of which the comprehensive written exam is the second part. In the first part, each student will submit an annual review to the doctoral advisor, consisting of a record of progress through the program, relevant professional experiences, and, importantly, candidate self-assessment of academic and professional progress. Failure to submit an annual review upon repeat notification to students will constitute evidence of insufficient progress through the program, leading to consideration of dismissal from the program. Due process will be observed to protect student rights and program integrity.*

### NEUROSCIENCE

Mailing Address:  
James R. Unnerstall, PhD  
Director of Graduate Studies  
Graduate Program in Neuroscience (MC 526)  
840 South Wood Street  
Chicago, IL 60612-4325

Campus Location: 304 CSN  
Program Codes: 20FS0323MS (MS)  
20FS0323PHD (PhD)  
Telephone: (312) 996-7370  
E-mail: [jru@uic.edu](mailto:jru@uic.edu)  
Web Site: <http://www.uic.edu/depts/neurosci/>

Program Directors: Mark M. Rasenick, Simon T. Alford,  
and Keith Thulborn

Director of Graduate Studies: James R. Unnerstall

The Program in Neuroscience offers work leading to a Doctor of Philosophy degree in Neuroscience and a Master of Science degree in Neuroscience for physician residents in Psychiatry.<sup>a</sup> As a multidisciplinary program, students have numerous research opportunities in several departments across the campus. Fields of study cluster around three areas of concentration: neural signal transduction and molecular biology; systems and integrative neuroscience; human/therapeutic neuroscience, cognition, and neural imaging.

## Admission Requirements

Applicants are considered on an individual basis. Transcripts of all undergraduate and any graduate work must be submitted. In addition to the Graduate College minimum requirements, applicants must meet the following program requirements for Doctor of Philosophy and Master of Science:

### Master of Science

- **Degree Requirements** Doctor of Medicine (MD) degree from a nationally accredited program.
- **Grade Point Average** Successful completion of a Doctor of Medicine program from a nationally accredited program and admission to the Psychiatry Residency Program.
- **Tests Required** Successful completion of USMLE Steps 1 and 2.
- **Minimum TOEFL Score (if applicable)** 620 (paper-based); 260 (computer-based); 80, with sub-scores of Reading 19, Listening 17, Speaking 20, and Writing 21 (new Internet-based TOEFL).
- **Letters of Recommendation** Three required, preferably from instructors and advisors who are familiar with the applicant's recent work.
- **Personal Statement** A one-to three-page statement of the applicant's professional goals, including the justification for pursuing a career in neurosciences, is required.
- **Deadlines** The application deadline is February 1 (January 1 is recommended).

<sup>a</sup> *The Master of Science in Neuroscience is for those currently holding an MD degree and completing a Psychiatry residency program at UIC. These master's candidates will be supported from an NIMH Training Grant that is already in place at UIC that represents a specific initiative by the NIH to support the training of physician/scientists. No other candidates for the Master of Science degree will be considered. Students with terminal master's degrees do not command any additional advantage in competing for academic positions; entry-level research assistant positions usually require no more than a Bachelor of Science degree. More appropriate master's degree programs for students who wish to advance in industry or education are available in the departments of Biological Sciences or Psychology.*

### Doctor of Philosophy

- **Baccalaureate Field** No restrictions. Prior academic work in the following disciplines is strongly recommended:
  - Biology (8 hours)—introductory biology plus lab
  - Chemistry (16 hours)—general chemistry and organic chemistry plus labs or biochemistry (3–4 hours)
  - Physics (6 hours)—introductory physics
- **Grade Point Average** A minimum average of 3.00/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate study.
- **Tests Required** GRE General.

- **Minimum TOEFL Score** (if applicable) 620 (paper-based); 260 (computer-based); 80, with sub-scores of Reading 19, Listening 17, Speaking 20, and Writing 21 (new Internet-based TOEFL).
- **Letters of Recommendation** Three required, preferably from instructors and advisors who are familiar with the applicant's recent work.
- **Personal Statement** A one- to three-page statement of the applicant's professional goals, including the justification for pursuing a career in neurosciences, is required.
- **Deadlines** The application deadline is February 1 (January 1 is recommended).
- **Nondegree Applicants** Rarely accepted. Nondegree applicants must submit all credentials and meet the same admission requirements as degree applicants. The department only accepts nondegree applicants who have exceptional credentials and who desire to take a few specific courses for professional purposes. Nondegree students may not take practicum or individual study courses. Nondegree students will not be admitted to the degree program at a later time.

## Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

### Master of Science

- Three areas of concentration are available for study. These concentrations are:
  - Neural Signal Transduction and Molecular Biology
  - Systems and Integrative Neuroscience
  - Human/Therapeutic Neuroscience and Methods of Neural Imaging
- **Minimum Semester Hours Required** 32 beyond the baccalaureate.
- **Course Work** All students must take or show proficiency in GCLS 503, ANAT/NEUS 403, NEUS 501 and NEUS 502, and NEUS 511. Students will be required to take two modules per semester of GCLS 504 in their first year of study. Remaining courses will be chosen depending upon the concentration selected by the student. Registration and attendance for NEUS 595—Journal Club is required each semester.
- **Comprehensive Examination** None.
- **Thesis, Project, or Course-Work-Only Options** A master's thesis is required.
- **Other Requirements** Each student must present at least one seminar prior to graduation.

### Doctor of Philosophy

- Three areas of concentration are available for study. These concentrations are:
  - Neural Signal Transduction and Molecular Biology
  - Systems and Integrative Neuroscience
  - Human/Therapeutic Neuroscience and Methods of Neural Imaging
- **Minimum Semester Hours Required** Students must complete 96 hours of credit within 9 years from the baccalaureate. For those students entering the program with a valid Master of Science degree from an accredited institution, up to 32 hours of credit may be transferred if considered equivalent to core courses within the program.

- **Course Work** All students must take or show proficiency in GCLS 503, ANAT/NEUS 403, NEUS 501 and NEUS 502, and NEUS 511. Students will be required to take two modules per semester of GCLS 504 and GCLS 505 in their second year of study. A minimum of two research rotations (NEUS 506) is required during the first year. Of the 96 total credit hours, 32 will be from formal course work. Remaining courses will be selected depending upon the concentration chosen by the student. The remaining credit hours will be filled by research credit. Registration and attendance for Journal Club (NEUS 595) is required each semester.
- **Examinations** A preliminary examination, both written and oral, is required.
- **Dissertation** Required.
- **Other Requirements** Each student must present at least one midthesis seminar prior to graduation. A final public seminar and oral defense of the dissertation are required.

## INTERDEPARTMENTAL CONCENTRATION IN NEUROSCIENCE

### Mailing Address:

James R. Unnerstall, PhD  
Director of Graduate Studies  
Graduate Program in Neuroscience (MC 526)  
840 South Wood Street  
Chicago, IL 60612-4325

Campus Location: 304 CSN  
Telephone: (312) 996-7370

E-mail: [jru@uic.edu](mailto:jru@uic.edu)  
Web Site: <http://www.uic.edu/depts/neurosci/>

Program Directors: Mark M. Rasenick, Simon T. Alford,  
and Keith Thulborn  
Director of Graduate Studies: James R. Unnerstall

The Graduate Program in Neuroscience offers work leading to the graduate Interdepartmental Concentration in Neuroscience. Students in the following graduate programs may be eligible to complete the Interdepartmental Concentration in Neuroscience:

Graduate Program	Level
Anatomy and Cell Biology	PhD
Biochemistry and Molecular Genetics	PhD
Bioengineering	PhD
Biological Sciences	PhD
Biopharmaceutical Science	PhD
Chemistry	PhD
Nursing Science	PhD
Pharmacology	PhD
Philosophy	PhD
Physiology and Biophysics	PhD
Psychology	PhD

### Concentration Requirements

Students pursuing a concentration in Neuroscience must take NEUS 501 and 502 and at least 12 additional hours of neuroscience courses at the 400- or 500-level or BIOS/PHIL/PSCH 484 and 485 and at least 10 additional hours of neuroscience courses at the 400- or 500-level. Neuroscience electives will be assessed and approved by the Graduate Studies Committee of the Graduate Program in Neuroscience. Research, departmental seminars (journal

clubs), and independent study cannot be included in these 10–12 hours of course credit. Of these 10–12 hours, at least 50% must be outside the student's major department and must be divided among at least 2 other departments. Students must submit the topic of their doctoral dissertation and a list of the courses in neuroscience that they have successfully completed (a grade of B or better) to the Graduate Studies Committee of the Program in Neuroscience for approval no later than the time of the preliminary examination.

## INTERDEPARTMENTAL GRADUATE CONCENTRATION IN SURVEY RESEARCH METHODOLOGY

### Mailing Address:

Survey Research Laboratory (MC 336)  
412 South Peoria Street, Sixth Floor  
Chicago, IL 60607  
Attn: Allyson Holbrook

Community Health Sciences (MC 923)  
School of Public Health, 645 SPHPI  
1603 West Taylor Street  
Chicago, IL 60612-4394  
Attn: Frederick J. Kviz

Campus Location: Survey Research Laboratory, CUPPA  
Hall, 6th Floor  
Telephone: (312) 996-0471, (312) 996-4889  
Co-Directors: Allyson Holbrook, Frederick J. Kviz  
E-mail: [allyson@uic.edu](mailto:allyson@uic.edu), [fkviz@uic.edu](mailto:fkviz@uic.edu)  
Web Site: <http://www.srl.uic.edu/gcsmr.htm>

The Interdepartmental Graduate Concentration in Survey Research Methodology (GCSRM) is available at both the master's and doctoral levels, in conjunction with several participating units. The primary goal of the interdisciplinary graduate curriculum in survey research methodology is to provide graduate students with the opportunity for systematic, integrated study of issues relevant to the conduct of professional survey research. Graduate students electing the concentration receive the masters or PhD after having fulfilled the requirements of the Graduate College, their major academic units, and the Interdepartmental Graduate Concentration in Survey Research Methodology. Students in the following graduate programs may be eligible to participate in the Interdepartmental Graduate Concentration in Survey Research Methodology:

Graduate Program	Level
Political Science	MA, PhD
Public Health-Community Health Sciences	MS, PhD
Public Administration	MPA, PhD
Social Work	PhD
Sociology	MA, PhD

**Note:** Other academic units may have become participants since the publication of this catalog. Students in academic units not listed above should contact one of the GCSRM co-directors for current information.

## Admissions Requirements

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Applicants are considered on an individual basis. Applicants must be admitted or enrolled as regular graduate students in one of the participating academic units. Application forms can be obtained from the GCSRM Web site. Admission to the concentration must be made before the term in which the student will obtain the degree.

## Degree Requirements

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1. Fulfillment of all academic unit requirements.
2. In the case of doctoral students who have opted to use the concentration as a minor or collateral area, the student must include a member of the Survey Research Methodology Graduate Faculty as a voting member of his/her doctoral preliminary examination committee.
3. A minimum of 14 semester hours of course work, of which at least 7 must be from among the core courses in the concentration (CHSC 447, CHSC 577, BSTT 440, PA 588, PA 579, and STAT 431). If a student elects to complete both BSTT 440 and STAT 431, only one of those courses may be counted toward fulfilling the core course requirement.
4. The remaining hours must come from survey research methodology elective courses, independent study decided in consultation with the advisor, or alternative courses approved by the advisor and the director(s). Doctoral students may not apply dissertation supervision credits toward the survey research methodology electives.