# **LEARNING SCIENCES MAJOR**

Students must also complete the Undergraduate Registration Requirement (https://catalogs.northwestern.edu/undergraduate/requirements-policies/undergraduate-registration-requirement/) and the degree requirements of their home school.

## Concentration Program-16 units\*

\* 8 of the 16 units need to be at the 300-level

| Course                         | Title  |  |
|--------------------------------|--|--|
| Required Courses (9 units)     |  |  |
| LRN_SCI 201-0                  | Cognition and Action   |  |
| or LRN_SCI 251-0               | Special Topics in Learning Sciences  |  |
| LRN_SCI 202-0                  | Culture, Language, & Identity  |  |
| LRN_SCI 301-0                  | Design of Learning Environments  |  |
| 1 course for the Cognition cl  | uster from:  |  |
| COG_SCI 110-0                  | Introduction to Cognitive Science  |  |
| COG_SCI 207-0                  | Introduction to Cognitive Modeling   |  |
| COG_SCI 211-0                  | Learning, Representation & Reasoning   |  |
| HDC/LOC 347-0                  | Mapping and Spatial Analysis for Social Issues   |  |
| PSYCH 228-0                    | Cognitive Psychology   |  |
| 1 course for the Language ar   | nd Culture cluster from:   |  |
| ANTHRO 215-0                   | The Study of Culture through Language  |  |
| LING 220-0                     | Language and Society   |  |
| LING 221-0                     | Language and Prejudice   |  |
| LING 222-0                     | Language, Politics, and Identity Crosslisted with SLAVIC 222                                       |  |
| LING 223-0                     | Language & Gender Crosslisted with GNDR_ST 234   |  |
| 1 course for the Learning in S | Schools cluster from:  |  |
| LRN_SCI/TEACH_ED<br>302-0      | Social, Cultural, and Linguistic Contexts of Education   |  |
| LRN_SCI 338-0                  | Learning and Teaching with Technology  |  |
| LRN_SCI 351-0                  | Topics in Learning Sciences (Identity, Power, and the Historical Imaginary Across Social Contexts) |  |
| LRN_SCI/TEACH_ED<br>351-0      | Topics in Learning Sciences (Computer Science Education)   |  |
| SESP 320-0                     | Race and Education   |  |
| SOC_POL 351-0                  | Special Topics in Social Policy (Urban Education Policy and Practice)                              |  |
| TEACH_ED 301-0                 | Schooling in America   |  |
| 1 course for the Out of School | ol Learning cluster from:  |  |
| LRN_SCI/LOC 214-0              | Culture and Cognition  |  |
| or LOC 214-BR                  | Culture and Cognition: SESP Leadership Institute   |  |
| LRN_SCI 224-0                  | Holocaust Education Design   |  |
| LRN_SCI/LOC 308-0              | Redesigning Everyday Organizations   |  |
| LRN_SCI 351-0                  | Topics in Learning Sciences (Text Mining for Education, Organizations and Social Science Research) |  |
| LOC 306-0                      | Studies in Organizational Change   |  |
| LOC 351-0                      | Topics in Learning and Organizational Change (Cognition in Contexts)                               |  |
| SESP 204-0                     | Designing for Social Change  |  |
| SESP 251-0                     | Special Topics (Finding Your Path: Future Possibilities and Social Change)                         |  |
| SESP 323-0                     | Trauma and Atrocity: Holocaust Memory, Memorial and Museums  |  |

| SESP 351-0                   | Special Topics (Computing, Ethics, and Society)  |
|------------------------------|--|
| SESP 360-0                   | Magic Monsters & the Holocaust   |
| TEACH_ED 329-0               | Cognition and Culture in Teaching and Learning   |
| 1 course for the Design of L | earning Environments cluster from:   |
| SESP 260-0                   | Community Based Research Methodologies:<br>Educational Justice   |
| SESP 351-0                   | Special Topics (Youth Participatory Action Research and Community-Based Design Research)   |
| LRN_SCI 224-0                | Holocaust Education Design   |
| LRN_SCI 309-0                | Inclusive Making   |
| LRN_SCI 313-0                | Tangible Interaction Design and Learning   |
| LRN_SCI 326-0                | Design of Technological Tools for Thinking and<br>Learning   |
| LRN_SCI 351-0                | Topics in Learning Sciences (Sports, Technology and<br>Learning or Design of Sociotechnical Systems or<br>Computer Science Education)  |
| LRN_SCI 372-0                | Designing and Constructing Models with Multi-agent<br>Languages  |
|                              | at the state of th |

1 additional course in student's specialization

### **Concentration Extension Course (7 units)**

Must be selected from an approved list of courses in learning sciences, other SESP concentrations, and disciplines such as anthropology, communication studies, computer science, design, linguistics, and psychology. Must include at least 3 courses at the 300 level. Up to 3 units of SESP 390-0 Research Apprenticeship or SESP 399-0 Independent Study and 3 units of SESP 398-0 Honors Thesis may be counted toward this requirement.

### **SESP Core (8 units)**

or SESP 392-SA

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|------------------------------|---|--|
| Course                       | Title   |  |
| Seminar-1 unit               |   |  |
| SESP 200-0                   | Understanding Knowledge                                   |  |
| Human Development-1 unit     |   |  |
| SESP 201-0                   | Human Development: Childhood and Adolescence <sup>1</sup> |  |
| or PSYCH 244-0               | Developmental Psychology                                  |  |
| OR                           |   |  |
| SESP 203-0                   | Human Development: Adulthood and Aging                    |  |
| OR                           |   |  |
| HDC 310-0                    | The Art and Science of Aging                              |  |
| OR                           |   |  |
| SESP 251-0                   | Special Topics (Adult Development)                        |  |
| Methodologies −2 units       |   |  |
| SESP 210-0                   | Introduction to Statistics and Research Methodology       |  |
| or STAT 202-0                | Introduction to Statistics and Data Science               |  |
| or STAT 210-0                | Introduction to Probability and Statistics                |  |
| or PSYCH 201-0               | Statistical Methods in Psychology                         |  |
| or SOCIOL 303-0              | Analysis and Interpretation of Social Data                |  |
| SESP 272-0                   | Field Research Methods                                    |  |
| Experiential Learning-4 unit | s <sup>2</sup>  |  |
| SESP 392-0                   | Experiential Learning: Practicum                          |  |
|                              |   |  |

PSYCH 110-0 Introduction to Psychology is a prerequisite for PSYCH 244-0 and PSYCH 201-0.

Experiential Learning: Practicum Study Abroad

This 4-unit course may be taken either for 1 quarter during junior year or for nine weeks during the Summer Session before or after junior year; no fifth unit may be taken concurrently without special permission. At least 2 quarters before registering for the course, students must consult the SESP practicum director regarding procedures and site-placement application materials. For Summer

Session practicums, consultation should be scheduled at least 3 quarters in advance.

### **Overlay Requirements\***

 Overlay requirements are fulfilled by courses taken for the concentration

Course Title

#### **Global Engagement**

1 quarter of study abroad or 3 quarters of foreign language or equivalent

#### Heterogeneities, Systems, and Inequalities

1 course counted towards the concentration: HDC 305-0, LOC 214-0, LOC 214-BR, LOC 351-0 (Identities, Intersection, and Organizations or Global Organizations & Leadership), LRN\_SCI 202-0, LRN\_SCI 214-0, LRN\_SCI 224, LRN\_SCI 302-0, LRN\_SCI 309-0, LRN\_SCI 351-0 (Identity, Power, and the Historical Imaginary Across Social Contexts), SESP 251-0 (Finding Your Path: Future Possibilities and Social Change), SESP 260-0, SESP 317-0, SESP 320-0, SESP 323-0, SESP 325-0, SESP 351-0 (Computing, Ethics, and Society or Youth Participatory Action Research and Community-Based Design Research), SESP 360-0, SOC\_POL 313-0, SOC\_POL 315-0, SOC\_POL 331-0, SOC\_POL 333-0, SOC\_POL 351-0 (Intersectionality, Measurement, and Public Policy or Urban Education Policy and Practice or Religion and Policy or Racialization, Stress and Development in the US or Social Side of College), TEACH\_ED 301-0, TEACH\_ED 302-0, TEACH\_ED 329-0

#### Methods in Context

1 course counted towards the concentration: HDC 330-0, HDC 347-0, LOC 308-0, LOC 311-0, LOC 313, LOC 347-0, LRN\_SCI 224, LRN\_SCI 301-0, LRN\_SCI 309-0, LRN\_SCI 313-0, LRN\_SCI 326, LRN\_SCI 351-0 (Sports, Technology and Learning or Text Mining for Education, Organizations, and Social Science Research or Computer Science Education or Indigenous Methods in Research), LRN\_SCI 372-0, SESP 204-0, SESP 260-0, SESP 310-0, SESP 323-0, SESP 351-0 (Youth Participatory Action Research and Community-Based Design Research) SESP 360-0, SOC\_POL 330-0, SOC\_POL 331-0, SOC\_POL 332-0, SOC\_POL 333-0, SOC\_POL 334-0, SOC\_POL 351-0 (Social Side of College or Intersectionality, Measurement, and Public Policy)

### **Foundational Disciplines (10 units)**

- · 2 natural sciences (NS) courses
- · 2 empirical and deductive reasoning (EDR) courses
- · 2 historical studies (HS) courses
- · 2 ethical and evaluative thinking (EET) courses
- · 2 literature and arts (LA) courses

Selected courses from Weinberg College and professional schools across the University may be used to fulfill distribution requirements with the consent of the student's adviser and the SESP assistant dean for student affairs

### **Electives (8 units)**

Courses from any school across the University may be used to fulfill elective requirements. Students are encouraged to discuss their elective plans with their advisers; they may be able to pursue a second major or a minor using elective credits.