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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRN_SCI 201-0</td>
<td>Cognition and Action</td>
</tr>
<tr>
<td>LRN_SCI 202-0</td>
<td>Culture, Language, &amp; Identity</td>
</tr>
<tr>
<td>LRN_SCI 301-0</td>
<td>Design of Learning Environments</td>
</tr>
</tbody>
</table>

1 course for the Cognition cluster from:
- COG_SCI 207-0 Introduction to Cognitive Modeling
- COG_SCI 211-0 Learning, Representation & Reasoning
- PSYCH 228-0 Cognitive Psychology

1 course for the Language and 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 Schools cluster from:
- LRN_SCI 302-0 Social Contexts of Education
- LRN_SCI 338-0 Learning and Teaching with Technology
- LRN_SCI/TEACH_ED 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 302-0 Social Contexts of Education
- TEACH_ED 301-0 Schooling in America

1 course for the Out of School Learning cluster from:
- LRN_SCI 214-0 Culture and Cognition
- or LOC 214-BR Studies in Organizational Change
- LOC 306-0 Topics in Learning and Organizational Change (Cognition in Contexts)
- LRN_SCI/LOC 308-0 Redesigning Everyday Organizations
- 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 324-0 Pedagogies for History and Injustice: Holocaust Education Design
- SESP 351-0 Special Topics (Computing, Ethics, and Society )
- TEACH_ED 329-0 Cognition and Culture in Teaching and Learning

1 concentration extension course (7 units)

Required Courses (9 units)

- LRN_SCI 307-0 Designing Interactive Media and Technology for Learning
- 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 Learning
- LRN_SCI 351-0 Topics in Learning Sciences (Sports, Technology and Learning or Design of Sociotechnical Systems)
- LRN_SCI 372-0 Designing and Constructing Models with Multi-agent Languages

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)

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>SESP 200-0</td>
<td>Understanding Knowledge</td>
</tr>
<tr>
<td>SESP 201-0</td>
<td>Human Development: Childhood and Adolescence ¹</td>
</tr>
<tr>
<td>or SESP 244-0</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>SESP 203-0</td>
<td>Human Development: Adulthood and Aging</td>
</tr>
<tr>
<td>or SESP 389-0</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>HCD 310-0</td>
<td>The Art and Science of Aging</td>
</tr>
</tbody>
</table>

Methodologies —2 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>SESP 210-0</td>
<td>Introduction to Statistics and Research Methodology</td>
</tr>
<tr>
<td>SESP 272-0</td>
<td>Field Research Methods</td>
</tr>
</tbody>
</table>

Experiential Learning—4 units ²

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SESP 392-0</td>
<td>Experiential Learning: Practicum</td>
</tr>
<tr>
<td>or SESP 399-0</td>
<td>Practicum in Human Development - San Francisco</td>
</tr>
</tbody>
</table>

¹ PSYCH 110-0 Introduction to Psychology is a prerequisite for PSYCH 244-0.
² Practicum course must be in concentration field. 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

<table>
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<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>SESP 251-0</td>
<td>Global Engagement</td>
</tr>
</tbody>
</table>

Heterogeneities, Systems, and Inequalities
Learning Sciences Major

1 course counted towards the concentration: HDC 305-0, LOC 214-0, LOC 214-BR, LOC 351-0 (Identities, Intersection, and Organizations), LRN_SCI 202-0, LRN_SCI 214-0, LRN_SCI 302-0, LRN_SCI 309-0, SESP 251-0 (Finding Your Path: Future Possibilities and Social Change) and (Community Research Methods: Educational Justice), SESP 317-0, SESP 320-0, SESP 323-0, SESP 324-0, SESP 325-0, SESP 351-0 (Computing, Ethics, and Society or Public Learning Through the Arts), SOC_POL 313-0, SOC_POL 315-0, SOC_POL 331-0, SOC_POL 333-0, SOC_POL 351-0 (Intersectional Identities and Public Policy or Urban Education Policy and Practice) TEACH_ED 302-0, TEACH_ED 351-0 (Cognition and Culture in Teaching and Learning), TEACH_ED 341-0

Methods in Context

1 course counted towards the concentration: HDC 330-0, HDC 351-0 (Mapping and Spatial Analysis for Social Issues), LOC 308-0, LOC 311-0, LRN_SCI 301-0, LRN_SCI 309-0, LRN_SCI 313-0, LRN_SCI 326, LRN_SCI 351-0 (Sports, Technology and Learning), LRN_SCI 372-0, SESP 204-0, SESP 251-0 (Demystifying Quantitative Data and Community Research Methods: Educational Justice), SESP 310-0, SESP 323-0, SESP 324-0, SESP 351-0 (Public Learning or The Life Story Interview), SOC_POL 330-0, SOC_POL 331-0, SOC_POL 332-0, SOC_POL 333-0, SOC_POL 334-0

Distribution Requirements (10 units)

- 2 natural sciences courses
- 2 formal studies courses (mathematics, logic, etc.)
- 2 historical studies courses
- 2 ethics and values courses (philosophy, religion, etc.)
- 2 literature and fine arts 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.