Psychological and Quantitative Foundations, Ph.D.

Educational Psychology

The Doctor of Philosophy program in psychological and quantitative foundations with an educational psychology subprogram requires a minimum of 72 s.h. of graduate credit. Students are expected to maintain a cumulative g.p.a. of at least 3.00.

The subprogram synthesizes core content and methods of educational psychology with training in the learning sciences. Educational psychology is characterized by empirical research and theory typical of the social and behavioral sciences. The learning sciences reflects an outgrowth of cognitive science. The field offers a multidisciplinary approach to understanding when, how, and why people learn in social and material contexts that include but are not limited to classrooms. The learning sciences blends theories and methods from several disciplines, such as cognitive psychology, anthropology, instructional design, and more. Students will acquire the depth of knowledge and methodological sophistication necessary for original research that contributes to educational psychology and the learning sciences. They will develop and demonstrate their knowledge of learning theory and design principles in the context of research and design projects.

Students work closely with their advisor to develop a plan of study and define a program that matches their goals and interests. Those who begin the program after earning a master's degree or with coursework from another program may be able to waive some of the Ph.D. program requirements. Students who enter the program without completion of a M.A. thesis are required to complete a research practicum in which students assist with and eventually design and carry out original research during their first or second year. Students who have completed an empirical M.A. thesis acceptable to the faculty may omit the second-year project.

The program of study includes substantive areas within educational psychology and the learning sciences, including courses in cognition, development, learning theory, and the design of instruction, learning environments, and learning technologies. Other learning opportunities include a research practicum in which students assist with and eventually design and carry out original research, a slate of research courses that meet the College of Education’s research requirements, a minor area of the student’s choice, and a dissertation in the student’s area of interest.

Research Requirement

The heart of educational psychology as a field is the creation, dissemination, and use of rigorous research to better understand and address educational issues. While many of the required courses address various aspects of the guiding principles set out by the National Research Council, students engage in the following coursework and research-related activities.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSQF:6230</td>
<td>Research in Educational Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>All of these:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSQF:6200</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6203</td>
<td>Tools and External Representations in Individual and Social Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6204</td>
<td>Foundations of the Learning Sciences</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6205</td>
<td>Design of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6214</td>
<td>Design of Learning Environments: Theory, Practice, and Method</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6281</td>
<td>Cognitive Theories of Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6299</td>
<td>M.A. Project: Portfolio/Internship/Practicum</td>
<td>2</td>
</tr>
<tr>
<td>PSQF:7493</td>
<td>Ph.D. Thesis in Psychological and Quantitative Foundations (minimum requirement)</td>
<td>10</td>
</tr>
</tbody>
</table>
Core Courses

Selection of courses depends on a student’s area of specialization. Students should contact their advisor for additional approved courses.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least 9 s.h. from these:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSQF:6206</td>
<td>Advanced Child Development</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6208</td>
<td>Digital Media and Learning</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6211</td>
<td>Universal Design and Accessibility for Online Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6213</td>
<td>Advanced Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6215</td>
<td>Online Instruction: Design and Facilitation</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6216</td>
<td>Tools and Utilities for Online Teaching</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:6275</td>
<td>Constructivism and Design of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>PSQF:7331</td>
<td>Seminar: Educational Psychology I - Current Topics (topics vary; may be repeated if content is related to educational psychology)</td>
<td>arr.</td>
</tr>
<tr>
<td>EDTL:6833</td>
<td>History and Foundations of Social Studies Education</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Students may take up to 6 s.h. of elective coursework. Students can take PSQF:6217 Seminar in College Teaching and/or additional research courses. Other courses may be included in consultation with their advisor.

Minor Area

Students must complete a minimum of 12 s.h. that constitute a coherent program of coursework outside educational psychology and beyond the courses listed above. The minor area may be from a foundation discipline such as mathematics education, educational philosophy, or program evaluation. Courses must be numbered 5000 or above, can span across departments and colleges, and must be consistent with a plan approved by a student’s advisor.

Comprehensive Examination

The Ph.D. comprehensive examination emphasizes competence and depth in one or more narrowly defined areas of research and theory. Students choose from three options in consultation with their advisor and with the approval of the examining committee, composed of five faculty members and does not necessarily include the same faculty members as the dissertation committee. The options are a review article, an extended research activity, or a traditional comprehensive examination. For details of each option’s requirements, contact the Department of Psychological and Quantitative Foundations.

Admission

Applicants must meet the admission requirements of the Graduate College, including the minimum grade-point average. They must have a verbal score of at least 150 and a quantitative score of at least 152 on the Graduate Record Examination (GRE) General Test; successful applicants usually score higher (however, the GRE requirement has been suspended for the 2021-22 admissions cycle).

Applicants whose first language is not English must submit official test scores to verify English proficiency. Applicants can verify English proficiency by submitting official test scores from the Test of English as a Foreign Language (TOEFL), the International English Language Testing System (IELTS), or the Duolingo English Test (DET).

Applicants who do not meet all admission requirements may be granted conditional admission on the basis of other evidence, such as high grade-point average, strong academic preparation, and highly supportive recommendations. Conditional admission is rare.

Admission is for fall entry. Application deadline is January 15; late applications might not be considered for funding. Review of applications begins soon after, when applicants who wish to be considered for fellowships and other awards are screened. Admission decisions are announced approximately six weeks after the application deadline.

Applicants who accept admission or financial aid and do not relinquish either one on or before April 15 may not solicit or accept another offer. Offers made by the program after April 15 include the provision that the offer is void if the applicant has accepted and continues to hold a previous offer from another program listed in the American Psychological Association publication Graduate Study in Psychology and Associated Fields. This policy is consistent with standards set by the association’s Board of Educational Affairs.