

## **Cognitive Psychology**

The specialization in cognitive psychology is designed for students who have interests in human information processing and cognition, such as perception, attention, memory, human learning, or decision making, as well as quantitative methods more generally. The cognitive area encourages applications from students whose research interests align with or complement those of current faculty and students. These topics include: visual attention, perception, and oculomotor behavior (Dodd), development of spatial cognition and memory (Schutte), autobiographical memory, eyewitness memory, and errors of memory (Belli, Bornstein, Dodd), cross-modal and multimodal pattern recognition and memory (Dodd), cognitive aspects of survey responses (Belli), suggestibility and neuroimaging (Belli), legal and medical decision making (Bornstein), development of cognition across the lifespan (Bornstein, Dodd, Hoffman, Schutte), applications of cognitive psychology to teaching (Garbin), and the development, evaluation, and application of advanced quantitative methods within psychological research (Garbin, Hoffman).

## **Cognitive Psychology Program Requirements**

### **For a typical first-year student entering with a B.A. or equivalent:**

In the fall semester, a typical program could include:

- Psychometric Methods (PSYC 941; 3 hours)
- Research Other than Thesis (PSYC 996; 3 hours)
- Teaching Methods in Psychology (PSYC 974; 1 hour)
- One or more proseminars/graduate-level courses as relevant to the student's interest (as determined in consultation with the student's advisor; 3-6 hours)

For the spring semester of the first year, a typical program could include:

- Psychometric Methods (PSYC 942; 3 hours)
- Proseminar in Cognitive Psychology (PSYC 907; 3 hours)
- Research other than thesis hours (PSYC 996; 3 hours)
- Ethics for Psychologists (PSYC 925; 1 hour)
- One proseminar/graduate-level course as relevant to the student's interest (as determined in consultation with the student's advisor; 3 hours)

In total, a typical program of study of students pursuing a Ph.D. program in the cognitive area would include the following:

- 15-18 hours of Statistics/Quantitative Methods courses – these will include the PSYC 941/942 first-year methods sequence at a minimum, and depending on the student's needs, potentially the PSYC 944/945 longitudinal and multilevel modeling sequence, the PSYC 948/EDPS 970 psychometric and structural equation models sequence, other 1-hour PSYC 930 modules on special topics, or courses in related outside departments (e.g. Educational/Psychology, Statistics, etc.) as needed

- 9-12 hours from 3-4 proseminars, including PSYC 907
- 12+ hours of proseminars or graduate courses in other departments as applicable (e.g. Philosophy, Educational Psychology, Speech Pathology and Audiology, Industrial Engineering and Management Systems, Survey Research and Methodology)
- 6-9 hours of readings courses (PSYC 971-972) in areas related to the particular research interests of the student
- 18+ hours of research (3 hours each semester, including summer semesters for the first 2 years, usually under the PSYC 996 designation)
- 18-21 hours of Dissertation Research (PSYC 999)

The specialization in Cognitive Psychology includes a great deal of flexibility so that the selection of coursework and research training experiences can be adapted to the particular interests and career goals of the student. For instance, students who have undergraduate teaching in a liberal arts setting as a primary career objective may select a wider range of proseminars from different areas of Psychology than would a student aiming for a career in applied research in industry or government (who might, for example, select additional coursework in Human Factors and Ergonomics instead). Students aiming for a career with a strong research component in an academic setting might wish to take a somewhat narrower range of course offerings, and more research hours, as well as a larger concentration of methods/ statistics courses. Students who wish to pursue a quantitative concentration would be encouraged to take as many courses on statistics/quantitative methods as possible.

**Comprehensive Exams:** Students have a variety of options for satisfying comprehensive examination requirements for admission to candidacy. We strongly encourage those students who intend to pursue research-oriented careers to consider writing a Career Development Award Proposal via an NIH agency, or an equivalent type of fellowship award from NSF or other federal agencies as a means of satisfying this requirement. In addition to giving themselves the opportunity to receive funding support, such experience in grant-writing will be useful to them in seeking future employment. A second option is to write an extensive review paper in an area related to the student's dissertation topic. This option can facilitate initiation of the thesis project and may lead to a publishable article. Other, more individually-tailored comprehensive exam options may also be considered by the student's supervisory committee. Students are strongly encouraged to discuss their comprehensive exam plans with their advisor at the time their supervisory committee is approved (typically the end of the second year in the program), so that the format of the student's comprehensive exam can be approved at the initial supervisory committee meeting.