Learning Outcomes

Overview
In the course of studying for and completing a PhD in the field of Psychology, students will work toward mastering a broad understanding of causes of behavior, with a particular emphasis within at least one of our three areas of study: Social and Personality (S&P), Perception, Cognition and Development (PCD), and Behavioral and Evolutionary Neuroscience (BEN). Our faculty members have interests that go from influences on behavior in a social context, to neural mechanisms of learning, to evolution of brain capacities for particular behaviors. The major goals of our graduate program are for our students to appreciate the questions and approaches of those in the department outside their specific interests, and for them to become experts in their own chosen domain. We provide a variety of means for students to achieve these goals, from area and department research discussion and speakers, to repeated required presentations on their own research.

Each student’s course of study is determined in consultation with his or her committee, to remedy gaps in academic background, to determine a study focus and to gain needed knowledge for pursuing that focus. This is typical of many graduate programs at Cornell. Within this tailored and flexible format, though, all our students are expected to attain excellence in qualities related to excellence in research inquiry. These include 1) self-directed learning and mastery of the appropriate literature in the student’s subfield; 2) integration of the current state of knowledge to formulate contemporary and important research questions; 3) learning relevant data collection skills; 4) acquisition of appropriate statistical skills to design rigorous experiments and derive strong conclusions using careful analysis; and 5) mastering effective communication skills in written, spoken and presentation contexts.

Proficiencies
A candidate for a Ph.D. in Psychology is expected to demonstrate mastery of knowledge across the field of Psychology, and to contribute significant, original research to our understanding of behavior within his/her sub-discipline. In so doing, the candidate shall demonstrate the ability to:

1. critically evaluate the state of his/her field by analyzing available scientific literature
2. synthesize current knowledge and identify novel research questions in his/her chosen field
3. master appropriate research techniques and collect original data
4. analyze results using appropriate technological and statistical methods
5. place and interpret results into a scholarly context and identify their importance
6. master communication skills including the publication of scientific papers, the presentation of scientific talks and the delivery of pedagogically sound lectures
7. stay abreast of the current state of his/her chosen field
8. support and disseminate knowledge through collaboration, teaching and mentoring
9. uphold standards for scientific rigor and ethical behavior, including standards for ethical use of human or animal subjects in research.
Evidence of Learning

Learning is assessed in four main ways as part of a PhD program in Psychology.

A) The first is through formal coursework and registration unit grading, which includes exams, essays, participation and presentations (for coursework) and a semiannual assignment of registration units by the student’s committee documenting satisfactory progress toward the degree.

B) The second is through the admission to candidacy exam (i.e. the “A” exam). The A-exam typically is conducted in the third year of graduate study. It examines the student’s breadth and depth of knowledge throughout the field of Psychology. It assess the student’s potential for independent research in his/her area of study. The A-exam is conducted by the student’s special committee. While it is an oral exam, it typically flows from extensive essays written by the student in response to questions from committee members.

C) The third assessment is by all faculty members of the Field of Psychology and occurs annually. A student’s faculty advisor describes the student’s progress over the past year. Any faculty member can ask questions or provide input as part of this review. If problems are raised, the DGS and the committee then follow up on them.

D) The fourth assessment occurs at the close of graduate study in the defense of the dissertation. The defense typically comprises a public presentation of research results delivered to the field of Psychology followed by the B-exam proper, which is conducted by the special committee and examines the student’s originality of results, comprehension of research results, and written and oral communication proficiency.

Using Assessments to Improve the Program

Our assessments have identified three areas that sometimes cause concern:

1. Our program, like many at Cornell, has relatively few formal academic and course requirements. This can lead to students drifting and/or taking excessive time to complete their degree.

2. The A exam may be the first time at which the student produces a formal body of work. Students may find this overwhelming, due either to personality or intellectual issues.

3. Students may get relatively little training in practical aspects of science such as grant writing and job talks.

We are addressing these by:

1. Informing students more clearly of our program’s structure during initial recruitment interviews and at orientation

2. Increasing the use of our annual evaluation by Field faculty members to include explicit deadlines from the student’s chair for completing intermediate steps toward the degree

3. Having the DGS enforce deadlines for selecting a committee and taking the A exam

4. Formalizing our training in selling one’s self, in grant writing and in person.