Comprehensive exams: CNS area

The goal of the comprehensive examination is to evaluate students’ breadth and depth knowledge within the student’s area of concentration within CNS. While the contents of the exam is ultimately determined by the student’s committee, the expectation is that the exam will require the student to develop PhD-level mastery of contemporary and historical research both within the students narrowly defined area of expertise and areas outside the student’s immediate area of expertise. A good way to think about the exam is as a mechanism for deepening the student’s understanding of his or her own area of expertise while gaining expertise in another area of research.

Preparation for examination

Students, with input from the students advisor and examination committee, will develop an extensive reading list that provides both breadth and depth. The reading list is intended to provide a framework or structure for preparing for the exam. Note, however, that exam questions need not be exclusive to literature contained on the reading list, as specific questions may require students to go beyond their specific reading list to think creatively.

Structure of exam

While there is no set formula for designing comprehensive exams within the CNS area, generally the exam should follow the following format:

1. The exam shall be delivered as a take-home exam, followed (approximately two weeks later) by an oral defense
2. Students shall be provided 48 hours to complete the exam.
3. Students shall be permitted to utilize all available resources, including the internet, and all reading materials and notes (but excluding other people), to answer their questions
4. The exam shall consist of at least three sections as follows:
   a. A section focused on research within the students’ specific area of interest (e.g., memory, language, decision making, aggression, cognitive control, etc.)
   b. A section that requires the student to gain expertise in at least one related or secondary of interest
   c. A section on methodology, broadly construed to include, but not limited to, topics such as statistical methodology, computational modeling, experimental design, and neuroimaging techniques.

The committee members will evaluate the written exam and, if it demonstrates a sufficiently high level of proficiency, the student and committee will schedule an oral defense of the written responses. Based on the written materials and the oral defense, the committee will either (a) pass the student, (b) fail the student, or (c) if specific aspects of the exam do not demonstrate proficiency, ask the student to rewrite these sections within two weeks. If the student passes the comprehensive exam, he or she will advance to candidacy for the Ph.D. If the student fails the comprehensive exam, he or she will have 6 months to retake the exam. Failure of a second exam will result in dismissal from the program.

* Exam questions can be designed to require integration across the three topics.