

BNS- PRELIMINARY EXAM CHECK SHEET (2016):

Preamble: Successful completion of this exam is required prior to Ph.D. candidacy. The purpose of the exam is to allow students to demonstrate expertise in their chosen field within Behavioral Neuroscience. In preparing for this exam, students are expected to become immersed in the literature that defines their research domain. The goal is to acquire expertise in their area equivalent or superior to that of any faculty member and thus develop into research colleagues. The guidelines were designed to allow this difficult task to have considerable individual tailoring that will allow students to express their expertise, as well as provide consistency in both effort and evaluation.

Student: _____

Faculty Mentor: _____

Today's Date: _____

Committee Members (all BNS members):

1. Chair (Mentor): _____
2. _____
3. _____

Part 1. Comprehensive written exam: The breadth component of the comprehensive exam will consist of a two-day written exam period (two 3-hr blocks each day with a 1-hr break between blocks) in which students entering their 3rd year will prepare answers to four questions.

A. Breadth of Neuroscience Knowledge: Two of the questions will be designed to test the student's command of core neuroscience concepts, his/her ability to integrate information across the curriculum, to generate plausible hypotheses and to design experiments to test these hypotheses. The general BNS area faculty will prepare the two core neuroscience concept questions requiring students to integrate information across the main content areas and levels of analyses: 1) Neurophysiology, 2) Neurochemistry, 3) Neuroanatomy and 4) Psychopharmacology. Each question will have a different emphasis, asking students to consider a current critical issue in neuroscience.

B. Breadth of selective Behavioral Neuroscience Systems Knowledge: The remaining two questions will be from topic areas related to the student's general area of research interest (e.g., the neuroscience of reward, learning, neurobiology of disease or perception). In preparation for the exam, the student will pursue directed readings under the independent supervision of the prelim committee. Faculty members will work with the student to develop a reading list (10-15 papers per topic) for the course of studying for these questions. The reading list should be developed by the end of the spring semester of the second year.

**The answer to each question should be between 4-6 typed double-spaced pages in length, excluding references. Students can bring a copy of their reading list. However, students are expected to work independently when preparing their answers. Specifically, students are not to collaborate with other students, faculty, or colleagues in preparing their answers and are expected to strictly adhere to professional ethical standards that prohibit plagiarism. All documents will be processed through turnitin.com*

**Grades (High pass, pass, low pass, fail) will be based on the factual accuracy, completeness and clarity of the answers and a demonstrated ability to synthesize, critically evaluate and integrate information. A high pass is distinguished from a pass by the fact that the answer shows exceptional clarity and synthesis, greater than normal insight into the literature and a strong grasp of the strengths and weaknesses of the approaches often used to address the topic. Area expectation is that all students will earn scores of Pass or High pass for all answers. Ideally, each student would earn a High Pass on at least one question, showing specialized and outstanding knowledge. That said, a student will be considered to have qualified if they earn no more than 1 Low pass and no grades of Fail.*

Two or more low passes and/or one or more Fail is a failure to qualify. The consequence is either: required remediation or dismissal from the program, as detailed below:

If students earn either 1 Fail, 1 Fail and 1 Low pass or 2 Low passes, remediation is possible. In this case, the students will be required to take a second exam no more than 14 days after the grades from the first exam are announced. This second exam will include new questions that address the same topical areas as those that earned the student the deficient grades on the first exam. All answers on the remediation exam must earn grades of Pass or High pass in order to qualify and avoid dismissal from the program.

If a student earns either 2 or more Fails, more than 2 Low passes or 1 Fail and 2 or more Low passes on the first exam, they are subject to dismissal from the program.

Part II: Functional Capstone Project- The goal of this exercise is for the student to demonstrate expertise, within a specific research area, as reflected by a critical review of data and theory, as well as propose the future experiments or direction. The student can choose from the two options:

☐ Critical Review Paper
(25-30 text pages + refs)

☐ Grant Proposal (NRSA: Specific AIMS, Research plan and training plan, references+ extra background)

*This project is due on January 15 and late submissions will not be accepted.

*The quality of work should be appropriate for submission to a granting agency or journal-- regardless of intent to submit.

*The Mentor and committee members can only advise with the outline or specific aims page. Drafts cannot be read by the mentor or other faculty. Furthermore, help from other students/individuals is not acceptable and would be considered academic dishonesty.

* All documents will be processed through turnitin.com

* If a student receives a fail, he/she must rewrite the document within 1 month. If a student fails the second attempt he/she will be dismissed from the doctoral program.

Time-line for the Ph.D. in BNS:

