

# Cognition and Neural Science Graduate Handbook

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## ***I. Goals of the CNS Graduate Program***

The overarching goal of the graduate training program is to move students from being undergraduates who have a grasp of issues and methods as described by scholars, to functioning as scientists who formulate and answer important questions. Successful graduate training results in a shift in the locus of control from instructor to student, so that in the course of graduate training a student increasingly takes responsibility for his or her own education, and emerges with marketable professional skills and attitudes. This transition requires that faculty provide the initial structure to ensure students 1) master methodological and writing skills, 2) acquire breadth of training, 3) have appropriate models for professional ethics and behavior, and 4) experience training in conceptual and theoretical analysis and in independent thinking. The curriculum should be reasonably coherent, broad, rigorous, flexible, and responsive to individual student interests. It also should facilitate establishing a community that includes all CNS students and demonstrates how the different CNS methods and theories are related.

The CNS Graduate program aims to provide training in cognitive psychology, emphasizing both neural and applied levels of analysis. We have two defined sub-areas, cognitive neuroscience and basic and applied cognition, and many of the faculty research interests cross over both sub-areas. Our program uses a mentor system that encourages new students to join an ongoing program of research in a particular laboratory or when applicable, a larger research group that may span laboratories. Students are trained for careers in both academia and industry; the curriculum is therefore designed to help students gain expertise in basic research techniques, theory development, and teaching skills. All students are encouraged to present their research at national scientific conferences and to publish their research in professional journals.

## ***II. Coursework***

1. Area course requirements
  - a. First year Quantitative sequence, 6500 and 6510 (prior to Master's).
  - b. Two of a student's three department core requirements must be fulfilled (prior to Master's) with the Advanced Human Cognition course (fulfills Cognitive-Affective Bases core) and the Neuropsychology course (fulfills Biological Bases Core).
  - c. A one-semester CNS area methods course will be offered every other year (should be taken prior to Master's). The course includes 1) "big question" classes on topics such as scientific discovery, scientific method, and converging methods in cognitive science, 2) cognitive methodological topics such as multiple levels of analysis, processing models, and cognition in context, and 3) an introduction to specific techniques and their assumptions (e.g., RT in human and animal studies, animal neuroscience techniques, brain imaging, special populations case and group studies, dynamic systems modeling). These methods will not be taught in sufficient detail that a student will become competent to conduct independent research using them. Instead, a student is intended to acquire scientific literacy and to see how specific methods illustrate general methodological issues. An overall goal is to give students practice in critical analysis of theory, some

practice in theory development and evaluation, and in critical thinking. CNS faculty will participate in this course by attending some class sessions that involve their methodological expertise.

- d. History and Systems (prior to Ph.D.).
- e. Third department core course fulfilling either the Social Bases of Behavior or the Individual Behavior Core areas (prior to Ph.D.).
- f. At least two different area seminars are required and more than two are encouraged. It is suggested that students take a number of seminars in diverse areas in order to broaden thinking about different cognitive approaches. We strongly recommend at least one seminar with a cognitive neuroscience emphasis and one with a basic/applied cognition emphasis, although some seminars do not have clear boundaries between these areas and it is not required to document the two separate areas.
- g. Students must participate in the CNS area Brown Bag every semester (described in more detail below).
- h. The advanced quantitative courses (e.g., MLM, SEM) offered in the department are not required for CNS students, but strongly encouraged for those who will need the analysis techniques for their own research projects

Some courses in other programs or departments that might be useful for some students are identified as: Neuroanatomy (Neuroscience); grant writing (Neuroscience); Vision Science (Computer Science); Medical decision making & expert systems (Bioengineering); ergonomics (Mechanical Engineering), Cognitive Science and History and Philosophy of Science (Philosophy). Students are encouraged to discuss course options outside of the psychology department with their advisors.

Note:

The procedure for faculty to follow in order to offer any CNS seminar will be as follows.

- a. Any faculty wishing to teach a CNS area seminar will describe to the area faculty, at least one year in advance, some examples of what the proposed readings will be, how they will advance student professional development, student assignments, and grading procedure.
- b. Each proposed seminar will have a component dedicated to furthering student awareness of conceptual analysis, theory development and evaluation.
- c. After approval by area faculty, a course syllabus will be distributed to area faculty and students at least one semester in advance.
- d. Each proposed seminar will need to be described in terms of how it fits into the broader CNS area instructional mission.

### *Summary of CNS and Departmental Course Requirements for Masters and Doctoral Degree*

| <i>Course</i>   | <i>Details and Timeline</i>  |
|---|--|
| First Year Practicum, Psych 6000, 6100  | Complete two semesters in first year   |
| Three departmental core courses<br><ul style="list-style-type: none"> <li>- <i>Psych 6700</i> Neuropsychology (Fulfills Area I Biological Bases)</li> <li>- <i>Psych 6120</i>, Advanced Human Cognition (fulfills Area II, Cognitive-Affective Bases)</li> <li>- <i>Third Core</i>, must fulfill either Area III Social Bases or Area IV Individual Behavior</li> </ul> | Two out of the three must be completed by the end of Spring semester of the 3 <sup>rd</sup> year, before the Master's degree; the third must be completed before the Ph.D. |
| Quantitative Methods, Psych 6500, 6510  | Complete in Fall and Spring of first year  |
| CNS Approaches to Research, Psych 7966  | Complete no later than 3 <sup>rd</sup> year  |
| History and Systems, Psych 7508   | Complete for Ph.D., recommended year 3 or 4  |
| At least two CNS area seminars (more are recommended)   | one with cognitive neuroscience emphasis and one with applied cognition emphasis   |
| CNS Brown Bag, Psych 6130   | Every semester   |

### **III. Laboratory Work**

Students are expected to enter the program to work primarily with a specific faculty advisor and to be actively involved in research throughout their graduate training. It is also common to enter the program with a primary and secondary advisor in mind, or with the aims of working in multiple laboratories. *The conduct of research should be given high priority.* Students should be actively involved in research at *all* stages of their graduate training. This involvement is in addition to the formally required master's and dissertation project. Although much of the student's research activity will be with his or her advisor, collaborative projects with other faculty and students are strongly encouraged and supported. Extensive research and writing experience in graduate school is excellent preparation for one's professional life. In addition, a student needs to have completed, written up, and published several research projects to be viable on both the academic and applied job markets. Procedures to facilitate progress in research are the following\*:

\*This is a guideline for students entering the program without their masters in Psychology. See section IV for students entering with prior graduate work

### First-year

- A. Students are expected to actively participate and “take ownership” of at least one empirical research project that fits into the ongoing work of the lab. This is a minimum and most students should be involved in more than one project as the year progresses. This initial research experience is expected to help set the stage for a Master’s thesis project (see more detail below) and may become part of the project.
- B. Students should organize a three-faculty member supervisory committee by the end of Spring semester. The student should work with the faculty advisor to develop the Master’s project idea. A pre-proposal (1-2 pages) on the topic of interest for the Masters project should be presented to the supervisory committee members at this time to discuss the idea, the scope, and timeline of the project. The meeting may be with the committee as a group, or individual meetings with the student and faculty member. A majority of the supervisory committee should consist of CNS area members unless the entire CNS faculty approves otherwise.
- C. First CNS brown bag talk
- D. Submission of grant proposal (NSF pre-doctoral) during the first year or beginning of the second, if appropriate.

### Second-year

- A. Complete the Master’s proposal and hold colloquium in the Fall semester. Faculty advisor should work with the student to develop the proposal in its complete form before it is formally given to the rest of the supervisory committee. However, the student should keep open communication with the other supervisory committee members during the development of the thesis proposal, e.g., request feedback, discuss ideas, etc.
- B. Conduct Master’s research project. Aim to complete the thesis defense by summer after second year.
- C. Conduct secondary project(s) which expand the scope of the student’s research, stimulate further research ideas, and lead to publishable work.
- D. Write and submit manuscripts for publication
- E. CNS brown bag talk, focus on Master’s thesis project or other significant project

### Third-year

- A. Complete the Master’s thesis and hold defense by the end of the Fall semester of the 3<sup>rd</sup> year. Faculty advisor plays a significant role in all parts of the Master’s including experimental design, data analysis, and feedback on writing.
- B. Propose Preliminary Exam project (see more details below) by the end of Spring semester.

- C. Conduct research that will become preliminary studies for dissertation and lead to publishable work.
- D. Write and submit manuscripts for publication
- E. CNS brown bag talk

#### Fourth-year

- A. Complete Preliminary Exam project three months after proposing
- B. Write dissertation proposal and hold colloquium
- C. Continue/develop secondary research projects that may be outside of the dissertation
- D. Write and submit manuscripts for publication
- E. CNS brown bag talk, consider the conceptual talk as described in section VIII

#### Fifth-year

- A. Complete dissertation research and hold oral defense
- B. Write and submit manuscripts for publication
- C. CNS brown bag talk on dissertation or other significant project

Note: It is appropriate to give the committee at least two weeks to read any substantial document before a defense or presentation. If otherwise, students should discuss an alternative plan with the faculty member.

### ***IV. Students Entering with Prior Graduate Work***

As discussed in the Psychology Department Graduate Handbook, students who enter with a Master's or other prior graduate work have the option to establish a 3-member supervisory committee that will work with the student to determine which requirements have been satisfied and which remain to be completed. The supervisory committee will help the student develop a timetable for completing requirements. If the committee agrees to waive courses, the student should submit a syllabus and copy of the textbook to the current or most recent instructors of the courses proposed for waivers. The instructor(s) may also request additional information about the prior coursework. Once the student establishes which Master's level requirements remain, she or he should propose a 1 or 2 year schedule for completing them, have it signed by the supervisory committee and Graduate Committee Chair, and place a copy in the student's folder (see Psychology Department Graduate Handbook for full details).

The Master's thesis requirement may be waived if the supervisory committee approves a Master's thesis completed at another institution. The student would need to submit the thesis to the committee and undergo a defense meeting on the project. The committee should send a memo on the decision to the Graduate Committee Chair for final review and approval, and placement in the student's folder. The memo is for the student's protection, as it assures that whatever agreement is reached will be honored by the Psychology Department. If the thesis is not approved, or in conjunction with the advisor, the student decides not to waive the requirement, the student will need to complete a thesis project.

The University of Utah Graduate School rule is that all students who enter with a Master's degree, even if that degree is not in psychology or if the prior thesis and graduate work is not accepted in our program, are entitled to a maximum of four years of tuition waivers (compared to a maximum of five years for students who enter without a Master's degree). Should a faculty member or clinical site wish to pay for a fifth year of funding for such a student, additional funding (either from a grant, clerkship site, or the students' own resources) would be required to pay tuition. As students need to be continuously enrolled for at least 3 credit hours, the minimum resident tuition for each semester (based on Fall 2010 rates) would be approximately \$1300 for 3 credits, and approximately \$2900 for a full load of 12 credits.

Guideline for 4-year plan for students who enter with a Master's degree in Psychology:

#### First-year

- A. Students are expected to actively participate and "take ownership" of at least one empirical research project that fits into the ongoing work of the lab. This is a minimum and most students should be involved in more than one project as the year progresses. Projects worked on in the first year should help the students develop ideas for additional projects which may lead to the dissertation.
- B. Students should organize a three-faculty member supervisory committee by October of the first semester and if they intend to submit their Master's thesis from another institution. The Master's thesis should be defended as described above by the end of the first semester. The advisor (and supervisory committee) will also help the student determine a timeline for remaining Master's level requirements (e.g., coursework).
- C. Students should develop ideas for their preliminary exam project during the first year and propose the prelim project by the Fall semester of year 2.
- D. Complete quantitative sequence (if appropriate) and take core courses when offered.
- E. First CNS brown bag talk (could be Master's thesis defense)

#### Second-year

- A. Form a 5-person preliminary exam committee, propose and complete the preliminary exam three months after proposing.

- B. Conduct research project(s) which expand the scope of the student's research, stimulate further research ideas, become preliminary studies for dissertation, and lead to publishable work.
- C. Write and submit manuscripts for publication
- D. Complete core courses (when offered)
- E. CNS brown bag talk

#### Third-year

- A. Write dissertation proposal and hold colloquium by end of year 3
- B. Conduct dissertation studies
- C. Conduct secondary research projects outside of the dissertation
- D. Write and submit manuscripts for publication
- E. Complete all required courses
- F. CNS brown bag talk

#### Fourth-year

- A. Complete dissertation research and hold oral defense
- B. Complete other research projects
- C. Write and submit manuscripts for publication
- D. CNS brown bag talk on dissertation or other significant project or job talk

### ***V. Master's Thesis Guidelines***

The CNS area has designated that the master's thesis defense is to be completed by the December of the student's 3rd year in the program. This goal can be attained with the following timeline:

1. Appoint committee and have a pre-proposal idea by the end of Spring semester of the first year
2. Hold colloquium in Fall semester of the second year
3. Hold defense by the end of the Fall semester of third year, at the latest.

The purpose of the master's project is to provide students with experience in all phases of the design, execution, analysis, interpretation, and communication of research. Thus, it is essential that projects be manageable within the time frame provided by the area. The CNS area faculty believes that the learning objectives of the master's requirement can best be met by performing a research project that is part of the advisor's ongoing research program. It is neither necessary nor desirable to design projects that are completely independent of the advisor's research, or that are broad in scope. The important criteria are that master's projects be well designed, competently executed and ask and answer a clearly stated question. The Master's proposal should be a relatively brief document (about 5-8 pages, single spaced) including Introduction/Specific Aims, Background, Proposed Methods, Predictions/Relevance, and References. The thesis should be written in the style and length of a submitted manuscript.

## ***VI. Preliminary Exam***

The format of the exam is a literature review paper. The purpose and goals of a paper such as this are for the student to demonstrate the ability to synthesize and critically analyze a body of literature with intellectual independence from their faculty advisor and supervisory committee. The paper should have an original thesis and provide a critical perspective, meaning that the literature should be analyzed in a way that involves the student's own ideas and provides a new contribution to the research topic. Often this will involve the development of future research/experiment ideas which may inform the dissertation. The student's goal should be to aim for a publishable review paper (although it is not a requirement that the paper be publishable for a pass or high pass to be awarded).

### What does intellectual independence mean?

The project is a test of the student's ability to think and write with depth on a topic in cognition or neuroscience, likely related to their dissertation topic, but not necessarily so. Feedback from the advisor, committee, or other colleagues during the process is encouraged in the form of high-level discussions about conceptual ideas and/or questions about the organization/flow of the paper. Students should seek guidance from their advisor(s) when needed. Drafts of a written document can be submitted to the advisor for feedback at a high-level. Feedback in the form of written editing in the document is not permitted. When a written draft is submitted to a faculty member, the faculty member will document the amount and type of feedback given to the student and circulate it to the entire supervisory committee.

### What is the process for proposing and carrying out the preliminary exam?

#### *Before the proposal*

1. Think about potential ideas for the prelim and discuss with your advisor.
2. Arrange informal meetings with your potential prelim sub-committee members to request their participation on your committee (the prelim sub-committee is made up of 3 faculty members). At this meeting, present a general idea of your direction of the preliminary exam topic and get oral feedback if possible.
3. Develop the proposal idea. This includes writing brief statements of the idea to present to your advisor and gathering the relevant literature. This is a process that should take 1-3 months.

### *The proposal*

4. Arrange a formal meeting of the prelim sub-committee members to propose and agree on your preliminary exam project. This should be a brief oral presentation of the idea (may use presentation slides but this is not required) accompanied by an abstract, outline of the paper, and partial reference list. Before this meeting, send the abstract and outline to the entire CNS faculty, which serves as the examination committee. The faculty are encouraged to respond with feedback to the student and primary advisor before the formal sub-committee meeting. At the meeting, the committee works with the student to come to an agreement about the scope and timeline for the completion of the project. A reasonable goal for completion is a 3-month period (starting after the formal committee meeting) and about 30-50 double spaced manuscript pages.
5. The agreement on format and timeline should be written up and circulated to all CNS faculty.

### *Completion of the project*

6. Submit the final paper to your advisor. The advisor must approve the document before it can be submitted to the prelim sub-committee. If the advisor gives feedback that the document is not ready for submission, that feedback should be documented and distributed to the committee.
7. Submit the final paper to your prelim sub-committee at least two weeks before a scheduled oral defense meeting.
8. Conduct a brief presentation of the paper (about 20 minutes with slides) and be prepared to answer conceptual questions relating to the proposal.

### Timeline and Procedure for Preliminary Exam

Students should form a 3-faculty member sub-committee in preparation for the preliminary exam and dissertation proposal after the Master's is completed, by the beginning of the Spring semester of their 3<sup>rd</sup> year. The entire CNS area faculty make up the *examination committee*, but will take the recommendation of the 3-faculty member sub-committee on the outcome of the exam. While the committee members may change for the dissertation, the committee should be formed with the topic of the preliminary exam and dissertation in mind. According to the graduate school requirements, the dissertation committee requires one member outside of the Psychology department, although the preliminary exam committee does not require an outside member. The exam should be completed by the agreed upon target date. If more time is needed, the student must request approval from the 3-person sub-committee and the extended timeline will be written up and circulated to the examination committee (all CNS faculty).

If a student wishes to propose an alternative format of the preliminary exam (other than the review paper), the student should petition the supervisory committee to do so.

The exam should be completed by the beginning of the Fall semester of the 4<sup>th</sup> year.

### Grading of Preliminary Exam

Each of the sub-committee members will evaluate the written and oral defense of the project and will then provide an overall score. The project will receive a passing grade when the overall

scores of three or more graders are pass/high pass. When the scores of three or more graders are rewrite, the project will be revised and resubmitted within one month of receiving feedback. When the scores of three or more graders are fail, the student will have failed the Preliminary Examination Project and should follow instructions for remediation under “Failing grade” below. In the unusual case that the grading committee cannot reach a majority opinion (e.g., pass vs. rewrite vs. fail), the scores will be sent to the Area Faculty for their professional judgment and the assignment of a grade. Once a final grade has been determined, the prelim committee will provide to both the student and the area (examination committee) written documentation of the student’s score, along with an explanation of what additional steps, if any, may be needed to pass the Preliminary Examination Project.

*Grading scale.* Each project will be graded by the committee members using a 4 point scale:  
0 = Fail (Inarticulate, vague, below that expected of modal students)  
1 = Rewrite (Underdeveloped, areas of significant weakness)  
2 = Pass (Clear, complex, concise)  
3 = High Pass (Exceptional, better than expected of modal students)

*Passing.* A passing grade on the project involves receiving a final score of pass/high pass from at least three of the graders.

*Rewrites.* If a student is asked to rewrite the prelim, he or she will have one month to do so following receipt of written feedback. The student should hand in the revised prelim to the advisor, who will distribute it to the committee. The committee will grade the revised project as either *pass or fail*, no more than two weeks after it has been turned in and distributed. The committee chair will then provide the student with written feedback and the final grade. Only one rewrite is allowed.

*Failing.* If the student fails outright (without a rewrite option) or fails after a rewrite has been completed, the student will be allowed a second chance to successfully complete the prelim. In such a case, the student needs to develop a plan to remediate the problems noted (in collaboration with his or her advisor). The CNS area faculty are required to formally approve the plan (typically this will involve proposing and writing an alternative project on a new topic). Once the remedial plan is approved by the area faculty, the student must complete the plan and turn in the written product within three months. One rewrite of the new project is allowed. If the student fails a second time, he or she will be dismissed from the program.

## ***VII. Dissertation Proposal and Oral Defense***

After successfully completing the preliminary exam, a student should formalize their 5-person supervisory committee within 3 months of finishing the preliminary exam and meet with his or her committee to set a timeline for the dissertation proposal. Once the supervisory committee is formed, the student should give this information to Nancy Seegmiller and she will enter it electronically in the graduate tracking system, and report that the preliminary exam is completed. The proposal should be based on preliminary data, but proposed early enough in the project so that substantial empirical work will be carried out after the proposal date. The proposal is expected to be written in the format of a grant proposal to a relevant agency, usually NIH or NSF. The proposal should be approximately 12-15 single-spaced pages long. It should include

specific aims of the research, background, preliminary work, and proposed experiments with hypotheses. The written proposal should be approved by the faculty advisor and submitted to the dissertation committee at least two weeks before the oral proposal defense. The proposal defense should be completed by the Spring semester of the 4<sup>th</sup> year with the aim to complete the dissertation by the end of the 5<sup>th</sup> year.

### *Completed dissertation*

The department handbook has guidelines for the write up of the dissertation as one or two stand alone empirical articles. The CNS area expects one document written as an empirical article of a length ranging from 60-100 double-spaced pages, without counting references. It should be written in APA format and of the quality of a first-tiered manuscript submission. The relative length of the introduction, methods/experiments, and discussion sections will vary among students' individual research programs. Students should submit the dissertation document to the supervisory committee (2 weeks in advance of the oral defense) only after it is approved by the faculty advisor. The oral presentation should be about 30 minutes with at least 1 hour reserved for questions/discussion. The expectation of the dissertation is that the project reflects the student's independent and original scientific contribution.

The CNS area expects that students complete the Ph.D. requirements within five years from the date of matriculation into the graduate program. Any student may receive an additional year extension upon recommendation of the supervisory committee and approval of the department chair or director of graduate studies.

## ***VIII. Teaching experience***

Each student will complete one semester as a graduate instructor for a core content course in the CNS area (e.g., Cognitive psychology, Sensation and Perception, Brain and Behavior, Human Factors, Engineering Psychology). Evaluation of the teaching requirement will include 1) creation of a syllabus, 2) independent lecturing in the course, and 3) observations by advisor (plan to be determined by the supervisory committee). This does not have to be completed before the dissertation proposal. If circumstances prohibit the teaching of a core class (due to scheduling or other constraints), the student may work out an alternate plan with his or her advisor/committee to teach a non-core course (e.g., Research Methods) and supplement by giving several guest lectures in a core-area course. In the event that the student has decided to definitely not pursue a career in academia, then he or she can petition the CNS area coordinator with the approval of his or her advisor for this requirement to be waived by the area. The area coordinator will then consult with the rest of the area faculty before making a decision to waive the requirement. Demonstration of effective teaching through a TAship may be requested by area faculty in order to receive a waiver. This waiver cannot be requested until after requirements for the Master's degree have been met.

## ***IX. Brown Bag***

The Brown Bag is important for several reasons, including that it is the one occasion when all CNS faculty and students meet regularly. This meeting therefore has the potential to facilitate a student's professional development and in helping to give a sense of community. The Brown Bag should serve several purposes. It should feel non-evaluative so that new ideas can be

presented and nurtured and creativity encouraged. It should serve as a forum for students to learn how to give professional presentations, with faculty and other students providing open, constructive feedback. It is hoped that constructive feedback will be seen as such, by both faculty and students, and not as personal attacks. The goals of the Brown Bag should be discussed at the beginning of the semester to reach a consensus on our approach. General guidelines are as follows.

1. Meetings will be held Thursdays, 3:30-5. That time slot should be reserved, although meetings may not occur every week. All faculty and students are expected to attend and to be on time.
2. Different presentations may serve very different purposes. A speaker should therefore identify his or her goals. For instance, some presentations may be exercises in short conference talks, others may be attempts to get the area to consider broader, less specialized issues.
3. Students are expected to give a presentation at least once per year. Faculty are encouraged to present as well, to serve as role models and to facilitate communication about research among area members.
4. Each student is expected to give one Brown Bag before graduation that is a serious theoretical and conceptual analysis. This Brown Bag might consist of describing, for example, more of the intellectual and scientific development of the topic of the student's dissertation than is appropriate to put in the dissertation itself. The topic need not, however, be closely related to the dissertation. The critical requirement is conceptual depth.
5. At least one Brown Bag per year will be devoted to professional development, such as issues related to scientific integrity (authorship issues, mentoring issues, conflicts of interest, and so on).
6. Announcements of each brown bag topics from all areas will be circulated to the entire department. To the extent possible, we will use these meetings to establish better links with other areas.
7. This meeting time may also be used for area faculty meetings and faculty-student discussions of area issues.

## ***X. Evaluation Procedures***

A student's progress and development is evaluated through a variety of formal processes in addition to informal monitoring by the advisor. The CNS Faculty conduct semiannual reviews of all CNS students at the end of the fall semester and spring semester. At the end of the Spring semester of each year, the psychology department also conducts a review of the progress of all students. At this time the full faculty vote (1) to commend a few students in the areas of research, teaching, and service, (2) to award a Professional Development Award (\$500) to the student making the most significant contribution to research, teaching, and service that year, (3) to

recommend deadlines for students making slow progress through the program, and (4) to agree upon remedial measures or probation or dismissal in rare cases.

Prior to the spring semester review, students must complete a progress form. Then students meet with their advisors and review their accomplishments (and any problems) of the past time interval. In addition, goals for the coming interval are developed, including proposals for addressing problems that have arisen.

Advisors present this information and their recommendations to the CNS faculty at the semi-annual review meetings.

The CNS Area Coordinator presents the progress of CNS students in an annual student review meeting of the department, and all faculty have the opportunity to give feedback based on their interactions with the particular student. A formal statement of evaluation and recommendations of the student is then sent to the student by the advisor, with the approval of the CNS Area coordinator and the Department Chair.

### Evaluation Criteria and Appeals

The academic criteria for student evaluations are discussed in the departmental handbook and Graduate School bulletin. Students are evaluated in the areas of course work, teaching, research, progress toward the master's and/or Ph.D. degrees, service, and professional behavior. Every attempt is made to help students as they work toward their degrees.

If a student wishes to appeal the recommendations and/or decisions of the CNS area, several levels of appeal are possible within the department and at other administrative levels and should be pursued in order.

1) The first level of appeal is the CNS area itself. If the student believes that additional information exists that should have been brought to the attention of the CNS area, he/she should immediately bring that information to their attention. It is most helpful if the student writes a petition to the CNS area (addressed to the CNS Area Coordinator), outlining the additional information, or the reasons why he or she believes that the recommendation/decision should be reconsidered.

2) The second level of appeal is to the chair of the department, who, at his/her discretion, may ask that the appeal be heard by the departmental Graduate Committee. The procedures for this appeal are given in the departmental Graduate Student Handbook.

3) The next level of appeal is to the Dean of the College of Social and Behavioral Sciences and then the Dean of the Graduate School. These procedures are described in the Graduate School Bulletin and must be followed as prescribed in the current year edition of that bulletin.

### Petition Process

In some circumstances, students might want to petition the CNS Faculty for an exception to the usual procedures or requirements (i.e., changing the nature or scope of the preliminary project, requesting a leave of absence, etc.). In such cases, the student should first consult with his/her

adviser and the other members of his/her committee in order to solicit feedback on whether such a petition is appropriate and justifiable. Although a student can make such a petition without the support of his/her adviser and committee, such petitions are less likely to be approved by the Area. To officially submit a petition, the student must draft a formal letter requesting the exception, describing the requested alternative procedures, and justifying the request. The student must state in the letter whether the petition has the support of his/her adviser and committee members. This letter will be distributed to the entire CNS Faculty, who will vote on the request within two weeks of its submission. The student may also request a face-to-face meeting with the faculty (in addition to submitting the letter) if they so desire. Faculty members who do not vote within the 2-week time frame will be considered to have voted in favor of the petition. Petitions should be submitted during the regular academic year. If students wish to submit a petition during the summer, they must first confirm that all Area faculty members will be willing and available to review the petition.

### Grievances

All CNS graduate students can expect to have problems related to their graduate education resolved in a fair and expeditious manner. It is the policy of the University to solve grievances internally and at the level that is most closely related to the origin of the problem. A graduate student who has a complaint with any member of the faculty, including the faculty advisor, should first discuss the problem with the person involved. If the graduate student is not satisfied at this level, or if discussion of the problem seems inappropriate because of the nature of the student's complaint, then the student should seek advice from the CNS area coordinator or, if necessary, from the chair of the Graduate Committee or the PIE Committee.

If the problem is not satisfactorily resolved at the level of the CNS area or by the Graduate or PIE Committee, then the graduate student should take the complaint to the chairperson of the psychology department. Depending upon the nature of the problem, the department chairperson may deal with the situation directly or refer the matter to the appropriate committee or authority.

If the grievance has not been resolved at the level of the department chairperson, the matter may then be taken to the dean of the College of Social and Behavioral Sciences, then, finally, to the Dean of the Graduate School as described in the current edition of the Graduate School Bulletin.