## Graduate Student Handbook

The Department of Psychology



Northwestern University

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## Department of Psychology Graduate Student Handbook

Welcome! On behalf of the faculty, staff, and students of the Northwestern University Department of Psychology, we welcome you to the Department, and to the University.

Our program strives to produce insightful, creative, and methodologically rigorous researchers. To do this, we combine training both in methods and in your particular area of psychology and extensive research experience.

The purpose of this handbook is to provide an introduction to graduate study in our department, including the requirements for a degree in each area, milestones along the way, expectations and evaluation processes, and teaching (TA) requirements. The handbook should be your "go to" resource for questions about the Psychology Ph.D. program, although it is not and cannot be your sole source of information. For example, you'll also need to keep abreast of The Graduate School's (TGS) regulations.

#### Your Role as a Graduate Student

As a graduate student, you are simultaneously a member of the Psychology Department but also of The Graduate School (TGS) and the University as a whole. All three communities will contribute both to your progress and success as a graduate student, and thus it is important to be informed about your role in each of these communities.

Our focus in this handbook is primarily on your role in the Psychology Department. In general, the Department handles your classes, research, teaching, and evaluation. We keep track of your progress, evaluate it, and provide feedback.

Of course, you will also have questions about more practical issues, such as health insurance, stipend, benefits, registration processes, obtaining or renewing an ID card (i.e., "Wildcard"), etc. The TGS web pages are always the first place to turn for this sort of information.

## Graduate Program Goal & Mission Statement:

We aim to train our students to become independent research scientists who can critically observe the world, formulate effective hypotheses, design/conduct sophisticated experiments to test them, and develop quantitative and/or qualitative models through rigorous data analyses to derive inferences that contribute to a deeper theoretical understanding. The required and elective courses are designed to help our students acquire foundational as well as state-of-the-art knowledge and skills. Clearly communicating scientific knowledge to different levels of audience is an integral part of being a competent scientist, so that our students are encouraged to present their research findings at conferences, publish them in peer-reviewed journals, and mentor undergraduate students in their research. Our students are also required to serve as teaching assistants as educating people in science is an important responsibility of a scientist as well as the act of teaching consolidates scientific understanding. Our students are expected to conduct high-quality, impactful experimental research for their PhD dissertation guided by their primary advisors and committee members in one of our five research tracks: (1) brain, behavior, & cognition, (2) clinical psychology, (3) cognitive psychology, (4) personality, development, & health, and (5) social psychology.

| Learning objective(s) Students should be able to | Milestone/<br>Requiremen<br>t/Capacity | Assessment Strategies and Criteria*  How do we know this objective has been achieved?  What criteria do we have to measure success? |
|--|--|---|
| Design and conduct an                            | First-year                             | Evaluated by the student's primary advisor and  |
| experimental study                               | project                                | a reader.   |
|  | (required by                           |   |
|  | some of the                            |   |
|  | five tracks)                           |   |
| Design and conduct a                             | Master's                               | Evaluated by the student's primary advisor and  |
| refined experimental                             | thesis                                 | two other committee members.  |
| study (can be a revision                         | (required by                           |   |
| of the first-year project)                       | some of the                            |   |
|  | five tracks)                           |   |
| Demonstrate the                                  | Qualifying                             | Evaluated by the student's primary advisor and  |
| mastery of the scientific                        | exam or                                | at least two other committee members  |
| literature in the                                | qualifying                             |   |
| student's chosen area                            | review                                 |   |
| of research and in                               | paper                                  |   |
| related areas.                                   | (required by                           |   |
|  | all five                               |   |
|  | tracks)                                |   |
| Propose a coherent set                           | Prospectus                             | Evaluated by the student's primary advisor and  |
| of studies to address                            | defense                                | at least two other committee members.   |

| substantive theoretical questions.           |                      |  |
|--|----------------------|--|
| Complete and write up the proposed research. | Dissertation defense | Evaluated by the student's primary advisor and at least two other committee members.   |
| Receive annual feedback on progress          | Annual<br>review     | Annual progress of each student is evaluated by the faculty members in the student's chosen research track, summarized in the letter that each student receives from the director of their research track. |

# General Requirements on the Way to a Ph.D. In Psychology at NU

## **Procedures and Policies for Graduate Students in Psychology**

The graduate programs at Northwestern's Department of Psychology aim to train scholars and researchers who will become future leaders of scientific psychology. We offer PhD programs in Brain, Behavior, & Cognition (BBC); Clinical; Cognitive; Personality, Development, & Health; and Social Psychology. Requirements differ across programs, but all students take a common set of general courses and as well, courses more focused on their specific areas of interest. All engage in a series of research projects, and all assist with undergraduate teaching.

This document focuses on policies and procedures that apply to five important issues in graduate school: (a) Funding, (b) Research and Academics, (c) Requirements, (d) Teaching, and (e) the Department's Grievance Policy for students.

## a. Funding

Northwestern University guarantees full funding (tuition + stipend) to all Ph.D. students in good academic standing through their first five academic years (9 months) and first four summers (3 months) in the program. In addition, students who receive an NSF or other multi-year external Fellowship may be eligible for a sixth funded year.

For students who receive external (i.e., non-departmental) funding before their 6th year, that funding will result in a 1 quarter reduction in the TA requirement for that year, or years, of the funding. For example, if a student receives external funding during their third year only, that funding would reduce their TA requirement to 1 quarter for that year and would give them an opportunity to receive a 6th year of departmental funding if funds are available. There is no guarantee of 6th year funding. Should departmental funding be granted during the 6th year, the student would be expected to TA. The exact number of TA quarters will depend on multiple factors including the student's funding history, the department's financial status, and the TA needs for the undergraduate courses that we offer (direct inquiries to Associate Chair, Ben Gorvine, and DGS, Satoru Suzuki). See APPENDIX for additional information on TAing and funding.

Funding can come from many different sources – e.g., University Fellowships (UFs), Graduate Assistantships (GAs), faculty grants, and other outside sources (e.g., NSF awards). In guaranteeing five academic years of support (and full support for four summers), the Department does not specify what the source of that support will be. For example, while some students may be funded primarily on a combination of UFs and GA-ships, others may work as research assistants on faculty grants or may be primarily funded through their own NSF awards.

Students are strongly encouraged to apply for funding from university-sponsored awards or other sources (e.g., NSF). To support that activity, the Department and the graduate programs will

provide resources, guidance, and advice regarding when and how to apply for external funding. Students are also strongly urged to consult the Graduate School's Office of Fellowships for further assistance. Students who receive outside funding and students who receive funding via faculty grants as Research Assistants receive some reduction in teaching assistant duties during the period of the award. Receiving outside funding is considered a strong honor and represents an important achievement in graduate school. There are also some university-sponsored awards that are relevant for students. Information on these and other awards can be obtained from the Fellowships office and the Northwestern University Graduate School website.

#### b. Research and Academics

In addition to department-wide requirements, each of the five programs or areas in the Psychology Department – BBC; Clinical; Cognitive; Personality, Development, & Health; and Social – has their own specific requirements regarding courses, first-year projects, master's theses, comprehensive exams, and so on. Students are expected make timely and satisfactory progress toward the requirements set forth by their respective programs. Hence, it is very important to speak with your advisor and area head about the requirements in your area (more senior students in your program are also often a good source of information). Faculty advisors are expected to provide students with prompt and reasonable feedback on their research and academic progress, including meeting regularly with their advisees. Students must have a primary advisor at all times during graduate school to remain in good standing. Typically students are admitted to the PhD program to work with a specific advisor. Sometimes during graduate school, a student may wish to change primary advisors. This is permissible, but there should be written documentation of an agreement to this change provided by both the student and the new primary advisor, and the DGS must approve this change. Students are also expected to maintain a minimum grade point average of 3.0 in their classes. The minimum course requirement for Ph.D. set by the Graduate School is 9 graded courses (not including independent study). Students are also expected to maintain full-time status (i.e., 3 courses, including independent study) for 8 consecutive quarters. After the residency and the 9 graded courses requirements are obtained, students are not required to take any regular courses, but are able to register for up to four courses a year with appropriate program approval. All students who receive funding are required to maintain full-time enrollment. Advanced students may also wish to sit in on a course (receiving no course credit) with permission of the instructor.

#### c. Requirements, Evaluations, and Exclusion

All students should receive written evaluations from their respective programs at least once a year. The written evaluation should be completed at the end of the spring quarter. To prepare the evaluations, faculty in a given area will meet to discuss each student's progress in classes, research, teaching, and other professional responsibilities. If any special remediation efforts are prescribed for the student, this information will appear in the evaluation letter. These written evaluations become part of the student's file. Students should meet with their advisors and/or

area heads to discuss these reviews.

In addition, for students who have not been making satisfactory academic progress, faculty may conduct additional reviews and provide a written evaluation letter as frequently as once per quarter (typically letters would be provided at the end of a quarter).

The Graduate School has **2 firm deadlines**. First, students must be <u>admitted to candidacy by</u> August 30 prior to the beginning of their 4<sup>th</sup> year. Admission to candidacy is reached by passing a comprehensive qualifying examination as administered by your particular program, as well as all of the required preparatory coursework and research.

Second, students must have a <u>prospectus</u> (dissertation proposal) approved by their committee by August 31 prior to the beginning of the fifth year.

In the Department of Psychology, failure to make satisfactory academic progress may result in exclusion from the program. Failure to make satisfactory academic progress includes but is not limited to: (a) average GPA below 3.0; (b) failing or not resolving an incomplete in a course; (c) unsatisfactory progress in research; (d) not meeting milestones related to the first year project, master's thesis, comprehensive examination, dissertation prospectus, and dissertation by the required dates specified in each area's milestones; (e) being without a primary advisor; and (f) not passing the English proficiency exam (for foreign students). Unsatisfactory progress will be communicated by the area head (in consultation with the primary research advisor) in an evaluation letter to the student (per the timeframes stated above) and will specify the ways in which the student has not made satisfactory progress in their research/academics, will outline steps the student must take in order for their progress to be considered satisfactory, and will provide a timeline for completing these steps. When a student receives an evaluation letter stating that they have not made satisfactory progress in the program, they will be placed on probation. After 1 quarter of probation, if progress in the program remains unsatisfactory, this is grounds for exclusion. With respect to milestones, if after 1 quarter of probation a student still has not successfully completed the milestone, they may petition the department for an extension of the milestone for 1 additional quarter. This petition must be sent in writing, and there will need to also be a letter of support written by the student's primary advisor. The petition and letter of support should be submitted to the DGS, who will then consult with the area head about the petition, and a ruling granting or denying the request will be provided in writing to the student. If the petition is granted, the student is allowed to remain in the program, but remains on probation for a second quarter. After 2 quarters of probation, if the milestone has not been successfully completed, the student will be excluded from the program, as per TGS rules. The Department of Psychology also follows TGS' rules for exclusion of students.

#### d. Teaching

#### General Requirements

Please refer to the 'Information about being a Teaching Assistant' document on the Psychology Department website (under Current Students) for details. Students are required to assist in the teaching of undergraduate courses in the Department. Specifically, regardless of a student's

funding sources, the Department requires that all students get teaching experience during their graduate-school career. To that effect, each student is required to serve as a teaching assistant during multiple years, as well as lead a class (i.e., lecture) at least *twice* on which they are evaluated by the faculty instructor and/or someone at the Searle Center.

All graduate students, regardless of their funding source or status, have teaching assistant duties in the department. Students typically serve as teaching assistants 2 quarters in years 1-4 and 1 quarter in year 5. [The first two years are different for Clinical students: they typically TA 3 quarters in their first year and 1 in their second year.] Most incoming grads (i.e., first year) are not required to TA during their first quarter here (except for in the clinical program, which has a different distribution of TAing across the first two years). Students receiving external funding (e.g. NSF, faculty research grant) for at least 2 quarters of an academic year receive a one course reduction in TA duties for the years that they are on those fellowships. See APPENDIX for additional information on TAing and funding.

## Being a Teaching Assistant: Expectations, Goals, and Best Practices

Teaching assistant responsibilities may include attending classes, holding office hours, constructing and administering exams, grading exams and papers, providing guest lectures, and leading discussion sections. For any given quarter, the amount of teaching responsibilities should average between 12 and 15 hours of work per week (maximum ~20 hours). These figures include time spent attending the class.

Faculty are expected to provide teaching assistants with specific information regarding their duties and responsibilities at the beginning of the course. Faculty are expected to make reasonable demands for teaching assistants and to treat teaching assistants in a collegial and professional manner.

Faculty are also required to evaluate the performance of the teaching assistants assigned to them every quarter by completing the Department's Teaching Assistant Evaluation Form. These completed forms will be placed in your file in the Department main office.

There are also several options for students to gain experience teaching their own course. First, students can complete either the Searle Center's Graduate Teaching Certificate and/or the Teaching Course offered by the Department. After, completing the Searle course they will be required (and able) to serve as an instructor for a course in the School of Professional Studies (SPS). After completing the Searle Certificate Program or the Department's teaching course, students will be eligible to serve as co-instructors for the Department's research methods course (assuming they have met the other requirements for this role).

Searle Center for Teaching Excellence: TA Conference

The New TA Conference will take place at the beginning of the fall quarter. All graduate students TAing for the first time are required to attend this full day of interactive workshops led by professionally-trained TA Fellows. The day begins with discipline-specific suggestions for how to succeed in your TAship, then there are concurrent sessions on a range of teaching and learning issues. More information here: <a href="https://www.northwestern.edu/searle/programs-">https://www.northwestern.edu/searle/programs-</a>

## events/grad/new-ta-conference/index.html

English Proficiency. Foreign students will be required to demonstrate English proficiency before serving as a TA. If you come from an English-speaking country, or graduated from a university at which English is the primary language of instruction, then you will be exempt. Otherwise, you will need to take a test of proficiency before serving as a TA.

If problems occur. Usually, your TA duties will be clear and straightforward. Of course, problems can arise. Most problems originate from poor communication or lack of clarity regarding goals and expectations. The professor who is teaching the course should discuss his or her expectations and goals. If this does not occur, ask for it as soon as possible. It is often helpful to exchange an email regarding the expectations, to make sure both parties are on the same page. How many hours are you expected to work per week? (typically around 15-20). How are students evaluated, and what is your role in that process? When will you duties as TA end? (e.g. after the exams are graded).

If you feel that you're working a lot more than you should be, start making a log of the hours you spend on your TA duties. If it's higher than what you should be doing, and you feel it's interfering with your work, then you should go to the professor and explain the situation. You might also want to check in with other (and, perhaps, more experienced) TAs for the course to see what their impressions of the workload are. Most professors will understand and work with you to make sure that you can keep up with your own coursework, research, and your TA duties. They can also give you tips about being more efficient, change your TA duties if necessary, get some grading help, and/or redistribute work among TAs. Sometimes TAs are asked to do more than they can handle because of the sporadic nature of the work. The best thing to do is to work with the professor and any other TAs for the course to plan for how the "heavy periods" of the course will be managed. It is important to speak up if you feel there is a problem; most of the time, the problems can be solved easily.

If you talked to the professor and this doesn't seem to have made things better, then your next step should be to talk to the Director of Graduate Studies (the DGS). If you prefer, you may also talk with your faculty advisor. In general, please feel free to contact the DGS if you have a concern that has not been adequately addressed.

## e. Permission To Work

Graduate students are expected to be full-time students conducting their studies and research. On occasion another funding opportunity may arise. When that situation occurs, permission to receive remuneration must be requested. The form MUST be submitted before the work begins.

A <u>Graduate Student Permission to work Request Form</u> is required when students are receiving additional pay if ANY of the following conditions are met:

- 1. The graduate student's service exceeds 10 hours/week.
- 2. The graduate student's period of service exceeds one month.
- 3. The requested compensation is greater than or equal to \$600.

Graduate Students should obtain the signature of their advisor and Director of Graduate Studies BEFORE submitting to Business Administrator (Tomeka Bolar, t-white1@northwestern.edu)

Students funded by an external sponsor should check sponsor guidelines regarding permission to work.

In general, NSF does not permit students on NSF fellowships to work for pay. In order to receive approval to work while on an NSF fellowship, please send the following as a separate information for us to consider:

- A short paragraph indicating how this service relates to your own research and objectives.
- A statement from the DGS or your advisor that this service is related to your research and how it will benefit you.

Per the NSF Administrative guidelines, "it is expected that the furtherance of the Fellow's educational objectives and gain of substantive teaching or other experience, not service to the institution as such, will govern these activities."

## f. Grievance Policy

Graduate students sometimes experience important disagreements and problems regarding program policies and/or their professional relationships with faculty in the Psychology Department. Should the student wish to seek assistance and/or state a grievance regarding such a problem, the student should consult first with his or her academic adviser(s). If the issue involves the adviser him- or herself, however, the student should seek assistance at the next level up – the Program (Division) Head. Following that, the student may wish to consult with the Director of Graduate Studies (DGS) in the Department. Next, the student may wish to consult the Departmental Chair. Finally, the student may wish to talk with a higher administrator in the Graduate School. At the present time, the Associate Dean of Student Services in the Graduate School fills this role.

The grievance policy, therefore, sets up a hierarchy of appeals – from adviser, to Division Head, to DGS, to Department Chairperson, to Graduate School Associate Dean. The student is encouraged to take the grievance first to the lowest level of the hierarchy and then, if necessary, move up from one level to the next. At the same time, students should know that one of the main responsibilities of the DGS is to monitor the progress and work to assure the well-being of all graduate students in the Department, across all Programs/Divisions. Therefore, students may, in some cases, wish to skip over the first two levels and appeal immediately to the DGS if they feel that discussing the problem with faculty in their Division (e.g., advisor, Program Head) is too awkward or threatening.

Finally, it is the policy of Northwestern University that no member of the Northwestern community may sexually harass any other member of the community. Graduate students who wish to learn more about the university's policy or who feel that they may have been sexually harassed should contact the University Sexual Harassment Prevention Office (<a href="http://www.northwestern.edu/care/get-information/sexual-harassment/">http://www.northwestern.edu/care/get-information/sexual-harassment/</a>). Please note, further, that if a student discusses an incident of possible sexual harassment with a faculty member, the faculty member is obligated to report the matter to the University Sexual Harassment Prevention Office.

## **Psychology Department Course Requirements**

Each student has department-wide requirements and as well, area-specific requirements for achieving their PhD. In order to achieve some familiarity with the field of psychology as a whole, each graduate student must enroll in the Proseminar (which provides an overview of research across all the areas of psychology represented by our department) as well as a Research Ethics course. All graduate students also have statistics requirements consisting of at least 2 courses (sometimes more, depending on the area), and all students have breadth requirements (a requirement to take courses, apart from Prosem, outside of one's area). The core first year courses include:

Psych 401-1: Pro-Seminar 1: Biological and Cognitive Bases of Behavior Psych 401-2: Pro-Seminar 2: Social and Emotional Bases of Behavior

Psych 519: Ethics: Responsible Conduct of Research

#### **Statistics**

Psych 405: Psychometric Theory

Psych 450: Fundamentals of Statistics

Psych 451: Statistics in Experimental Design

Psych 453: Linear Models: Correlation and Regression

[Because different areas utilize different research methods, each area requires a subset of the above core statistics classes. See Area Specific Milestones for exact requirements.]

Note that there is an option for students to receive a Department Quantitative Certificate by completing additional quantitative coursework. Please refer to the separate document online on the Department Quantitative Certificate Requirements.

In addition to the above department requirements, each area (BBC; Cognitive; Social; Personality, Development, & Health; Clinical) has additional requirements for achieving a PhD. Please see Area Specific Milestones for exact requirements.

You are allowed to register for 3- or 4- level courses. If there is a 1- or 2- level class that you are interested in taking, you should discuss it with both your advisor and the instructor of the course. You will need to convert it into an independent study (usually 499, sometimes a different designation if it's in another department). This often happens for introductory computer science classes, for instance. You **must** register for such classes as 3- or 4- level classes, and cannot change their status after taking them.

In addition to content courses (typically graduate seminars), 499 (Independent Study) may be taken as a "course," with some caveats. During the time preceding the master's degree, you may not take more than half of your graded courses as 499s. Also, the courses taken before your Master's degree may not consist of more than 1/3 499's.

You must maintain a minimum average of B (3.0) in your classes. After your third year, you are allowed to take up to 4 courses. In addition, you are welcome to sit in on a class with the permission of the instructor.

## AREA SPECIFIC MILESTONES:

## BRAIN, BEHAVIOR AND COGNITION

#### 1. Coursework

The minimum course requirements for the Ph.D. set by the Graduate School is 27 courses. The graduate program is designed both to encourage students to complete necessary coursework and to gain extensive research experience. Although there are some standard requirements (shown below), each student may take such courses as are needed in consideration of prior coursework and of the student's goals. Students begin doing research in their first year, devote more than half of their time to research in the second year, and nearly all of their effort in subsequent years. The doctoral program in BBC can be completed in four or five years; the actual time taken depends largely on the background of the individual student. The major requirements are:

## Key courses in Brain, Behavior & Cognition

Key courses in Brain, Behavior & Cognition are listed below. In addition to the required courses, six elective courses are to be selected in consultation with the faculty adviser. At least two of these courses must be breadth courses – that is, courses offered by other areas of the Psychology Department or by other departments at Northwestern. Note that Northwestern operates on a quarter system.

## **Required Courses**

- Psych 401-1 Psychology Proseminar (1)
- Psych 401-2 Psychology Proseminar (2)
- Psych 519 Ethics: Responsible Conduct of Research
- Psych 450 Fundamentals of Statistics (may be waived under some circumstances)
- Psych 451 Statistics in Experimental Design
- CSD 406 Functional Neuroanatomy or
- NUIN 440 Advanced Neuroanatomy

## **Electives (partial list)**

- Psych 312-1,2 Neurobiology and Behavior
- Psych 314 Topics Courses (when relevant)
- Psych 321 Neuroscience and Behavior Lab
- Psych 324 Perception
- Psych 342 Biological Bases of Mental Illness
- Psych 360 Human Memory and Cognition
- Psych 361 Brain Damage and the Mind
- Psych 363 Images of Cognition

- Psych 364 Topics in Cognitive Neuroscience
- Psych 405 Psychometric Theory
- Psych 421 Psychopathology
- Psych 422 Child Psychopathology
- Psych 442 Experimental Approaches to Personality
- Psych 453 Linear Models: Correlation, & Regression
- Psych 460 Topics in Cognition
- Psych 470 Topics in BBC
- Psych 471 Cognitive Neuroscience
- CSD 303 Brain and Cognition
- CSD 310 Biological Foundations of Speech and Music

## 2. Master Thesis

The student is expected to submit at least one research report to a journal by the spring quarter of the second year of the program. The student submits this report for approval to a Master's Thesis committee, which conducts an oral examination of the student. This committee ordinarily consists of at least two members of the BBC faculty, plus at least one other faculty member from outside the BBC area.

## 3. Comprehensive Qualifying Examination

The comprehensive examination is taken after the student has completed the required course work and Master's Thesis work. As the student approaches the completion of required courses, a Program of Study is developed, in consultation with the adviser. This Program of Study is designed to help the student develop an in-depth appreciation of areas that increase breadth of knowledge via mastery of topics related to the student's graduate research. The Comprehensive Exam on this Program of Study must be completed by the end of the graduate student's third year in the Ph.D. program (August 30<sup>th</sup>) in order that the student is to be considered in good standing.

At the beginning of the fall quarter of the third year, the comprehensive examination committee should be formed. The make-up of this committee is based on the topics selected in the Program of Study and developed by the student in consultation with the student's primary advisor(s). Members of the committee are selected to provide suitable guidance in the specific topic areas. The committee can include three or more faculty members, but at least two must be from the BBC area. Working with the committee members, the student develops a bibliography adequately covering six topics within the program of study. Each bibliography includes 12-20 papers to read within each area with the number of papers depending on the material (note that reading lists of 12 papers are considered minimal and longer lists are strongly preferred for well-researched topic domains). After approval of the bibliography by the committee, the student undertakes to master the areas selected. The reading period for the 72-120 paper reading list is typically expected to be 1-3 months.

The range of topic areas is determined collaboratively by the student, advisor and

committee. The six areas can cover a wide range of topics in brain, behavior and cognition. A more detailed exploration of a complex area can be accomplished by two topic lists on closely-related areas. It is expected that the topics will generally cover specific issues within basic content areas in brain, behavior, and cognition such as, sensory analysis, perception, memory, and emotion. Methodological areas can also be used as a core content area. To allow for breadth of knowledge and foster possible novel connections across topics, the set of topic areas can include allied fields and faculty from other areas of the Psychology department as well as other departments across the University.

After completing the readings, a two-day written, "closed book," examination is used to assess the student's mastery of these areas. On each day, 3 exam questions will be answered that are based on topic areas. The exam questions are collected from the committee by the advisor and provided to the student at a specific time during the day to start the exam. Students are typically given 2 hours per question to complete the exam (i.e., 6 hours/day for each day). Once the answers are provided by the student, the answers are graded by committee members, and the advisor assembles the grades and feedback from the committee and passes that along to the student. Essays are graded an NIH-style 1 to 9 grading scale where 1 is the best possible score. By the standard NIH review scale, 1=Exceptional (Exceptionally strong with essentially no weaknesses), 2=Outstanding (Extremely strong with negligible weaknesses), 3=Excellent (Very strong with only some minor weaknesses), 4=Very Good (Strong but with numerous minor weaknesses), 5=Good (Strong but with at least one moderate weakness), 6=Satisfactory (Some strengths but also some moderate weaknesses), 7=Fair (Some strengths but with at least one major weakness), 8=Marginal (A few strengths and a few major weaknesses), 9=Poor (Very few strengths and numerous major weaknesses).

Scores better than or equal to 6 are considered passing within each topic. An average score greater than 6.0 is considered to be a failing grade and the student will not advance to candidacy. Any individual essay scored worse than 6.0 can be requested to be rewritten by the committee member. Rewritten questions will be evaluated by the committee member and the advisor and must be judged satisfactory to complete the exam.

When needed, alternate arrangements for the comprehensive exam can be made with the agreement of the student, advisor, and head of the BBC area. For example, the exam can be planned to be completed as an "open book" format, typically in conjunction with longer reading lists across the areas and higher expectations for detail and depth in the exam answers. Students have sometimes found that in-depth reading in a specific area inspires them towards writing a review article that covers the area or connections to another area. This is encouraged, but generally does not replace the qualifying exam requirement. Writing a short exam essay in an area for which a review paper has already been written will likely be a straightforward task, and the review paper should be written to publication standards rather than on deadline for advancing to candidacy.

## 4. PhD Dissertation Proposal

After completion of the Comprehensive Examination, the student selects a three-person dissertation committee. In some cases, a larger committee is formed. At least two members must be from the BBC group, and one member is generally an outside examiner from another area, department, or university. As a first step in execution of the doctoral studies, the student develops a written research proposal, in consultation with the adviser. The student is also encouraged to discuss the proposal individually with the committee members. Usually during the fourth year, the committee meets as a group for the dissertation proposal examination, following the requirements of the department and the graduate school. Following the oral examination of the student during this meeting, the student's dissertation proposal should be finalized. The Graduate School (TGS) requires that the dissertation proposal be successfully defended by the end of students' 4<sup>th</sup> year in the program (August 31<sup>st</sup>).

#### 5. PhD Dissertation

After completing the dissertation proposal the student can then follow the plan of the proposal and complete a set of research reports. These should be prepared in a form suitable for submission to an appropriate journal (or they can already be submitted or even published). Usually during the fifth year of the program, the doctoral dissertation is submitted for approval to the dissertation committee during a dissertation defense. This final oral examination on the completed dissertation by the committee completes the dissertation approval process.

For all milestones, students must complete a TGS form to officially register completion of the milestone. See Page 34, Paperwork for The Graduate School (TGS), for more details.

#### CLINICAL

## 1. Coursework

The minimum course requirements for the Ph.D. set by the Graduate School is 27 courses.

## **Core Clinical Psychology Courses**

- 421-1 Psychopathology (first or second year)
- 494 Personality Psychology (first or second year)
- 495-1 Clinical Assessment (first or second year)
- 496-1 Psychotherapy (first or second year)

- 413, 414, 415 Practicum (second through fourth year)
- 420-1 History, Ethics, Diversity, and Consultation

## Research Design, Methodology, and Statistics

- 405 Psychometric Theory (first year)
- 434 Clinical Research Methods (first or second year)
- 451-1 Statistics in Experimental Design (first year)
- 453-1 Correlation and Regression (first year)

## Additional Required Courses (first year)

- 401-1 Proseminar (Biological and Cognitive Bases of Behavior)
- 401-2 Proseminar (Social and Personality Bases of Behavior)
- 519 Ethics Responsible Conduct of Research

## **Highly Recommended Courses**

- 312-1 Neurobiology and Behavior
- 412-1,2,3 Assessment Practicum
- 422 Child Psychopathology
- 423-1 Professional Issues in Clinical Psychology
- 442 Experimental Approaches to Personality
- 450 Fundamentals of Statistics
- 470 The Social-Emotional Brain
- Clin Psy 402-0 Assessment I
- 454 Latent variable models

In addition to the required courses listed above, at least one course must be taken in each of the following areas: biological, cognitive-affective, and social bases of behavior (though one quarter of Proseminar, 401-1, 2 may be used to satisfy the requirement in one of these three areas). Listed below are examples of courses that have been taken to meet this requirement in the past.

### **Biological Bases of Behavior**

- Psych 312-1 Neurobiology and Behavior I
- Psych 312-2 Neurobiology and Behavior II
- Psych 324 Perception
- Psych 357/499 Research Methods (Biological Basis) in Schizophrenia
- Psych 437-1 Neural Plasticity
- Psych 437-2 Neural Plasticity
- Psych 470 Social-Emotional Brain
- Psych 497 Biological Basis of Health Psychology
- Neurobio 321 Biological Clocks
- NUMS 472 Brain and Behavior: Introduction to Neuropsychology
- NUMS 475 Neuropsychological Diagnosis

- NUMS 476 Health Psychology
- NUMS 480 Introductory Clinical Psychopharmacology

## **Cognitive Bases of Behavior**

- Psych 324 Perception
- Psych 333 Psychology of Thinking
- Psych 334 Language and Thought
- Psych 424 Behavioral and Neural Bases of Visual Perception
- Psych 446 Human Memory and Cognition
- Psych 448 Sensory Processes
- Psych 460 Special Topics in Cognition
- Psych 461 Reasoning and Representation
- Psych 466 Analogy and Similarity
- Psych 560 Seminar in Cognitive Science
- EE/CompSci 348 Introduction to Artificial Intelligence
- EE/CompSci 435 Simulation of Cognitive Processes

## Social and Affective Bases of Behavior

- Psych 481 Theories in Social Psychology
- Psych 482 Research Methods in Social Psychology
- Psych 483 Social Cognition
- Psych 485 Psychology of Attitudes
- Psych 486 Stereotyping and Prejudice
- Psych 489 Seminar in Social Psychology (recent topics include Emotion; Marital Relations; Close Relationships)
- Anthropol 377 Psychological Anthropology
- Socio 355 Medical Sociology
- Socio 404-1,2 Designs for Descriptive Causal Research in Field Settings

Other courses available for students include all "300," "400," and "500" level courses offered by the Department of Psychology as well as a variety of courses offered in other departments of the University (Psychiatry, Counseling, etc.). Arrangements can be made for students to take courses at any of the other universities in the Chicago metropolitan area (e.g., University of Chicago, University of Illinois-Chicago Campus).

- 2. **First Year Project**: Requires completion and brownbag presentation during 2nd year. Must be approved by primary advisor. (There is no written product required for fulfilling this requirement).
- 3. **Second-Third Year Project**: Requires written approval of the final written research document by a two-person faculty committee by July after the third year. This serves as the student's Master's Thesis. The two person faculty committee can consist of clinical faculty.
- 4. **Comprehensive Qualifying Exam**: Can be satisfied in multiple ways, following consultation with the student's primary advisor:

- substantive review paper on a topic of interest to the student that has been approved by a committee chaired by someone other than the primary mentor
- conducting an empirical study under the supervision of a faculty member other than the primary mentor, and writing a manuscript describing the study and its results
- NIMH NRSA application or fellowship applications of similar magnitude Requires approval of committee of three faculty members, at least two but potentially three can be clinical.
- 5. Admission to Candidacy: Both defense of the Second-Third Year Project and completion of the Comprehensive Qualifying Exam are required for Admission to Candidacy. TGS (The Graduate School) requires Admission to Candidacy by the end of the third year. However, in recognition of the additional burden of clinical training, there is an understanding that clinical students will typically take longer. In practice, our students generally are admitted to candidacy during their fourth year, by spring quarter (i.e., before March). Students who have not been admitted to candidacy by this time will be placed on probation by The Graduate School.
- 6. **PhD Dissertation Proposal**: The first step in the dissertation process is a written research proposal ("prospectus"). The dissertation prospectus is presented at a proposal defense with a committee of three faculty members, at least two of whom are core clinical faculty. As with Admission to Candidacy, clinical students get a bit longer than other students. TGS requires that students defend their dissertation proposals by the end of their fourth year. Clinical students must do so by the spring quarter (March) of their fifth year. Otherwise they will be placed on probation by The Graduate School.
- 7. **PhD Dissertation:** After completing the dissertation proposal, the student then follows the plan of the proposal and completes their research project(s). The student writes the dissertation, and the written doctoral dissertation is submitted for approval to the dissertation committee, which is a committee of three faculty members, at least two of whom are core clinical faculty. The doctoral dissertation must be defended in a final oral examination (dissertation defense) in front of that committee.

For all milestones, students must complete a TGS form to officially register completion of the milestone. See Page 34, Paperwork for The Graduate School (TGS), for more details.

#### **COGNITIVE**

## 1. Coursework

The minimum course requirements for the PhD set by the Graduate School is 9 quarters of full-time course registration (a minimum of 3 courses per quarter). To achieve some degree of familiarity with the whole field of psychology, each graduate student in the

Department of Psychology enrolls in a proseminar the first two quarters of their first year, a research ethics course in the spring quarter of the first year, and takes three statistics courses over the first three quarters (Psychology 450, 451, and 453). Students in the Cognitive Program also take courses designed to serve as a foundation for later specialization within the area. The course requirements are fulfilled by any 6 courses taught by the program faculty that are either 400-level or are on the list of approved 300-level courses (Different Psych 460 courses must be taken with separate faculty members. Otherwise explicit approval is needed). In addition, one or more courses outside of the Cognitive area is required.

## **Approved 300-level Courses**

- 314-Special Topics (within the cognitive area)
- 324-Perception
- 334-Psychology of Language
- 358-Left Brain, Right Brain
- 361-Brain Damage and the Mind
- 362-Images of cognition

## **Approved 400-level Courses**

- 446-Human Memory and Cognition
- 461-Reasoning and Representation
- 466-Analogy and Similarity
- 460-Special Topics in Cognition

Note: Students can petition to make substitutions and variations. Core courses are to be taken in the first two years.

Beyond these core courses, no particular course is required of all students in the program. Each student is free to develop a program that will combine breadth and depth, in and outside the Psychology Department, to meet his or her objectives. To meet the requirement of one or more courses outside of the Cognitive area, students may take courses in other areas of the Psychology department, or outside the department.

Quantitative requirement: Because of the great importance of methodology, particularly of a quantitative sort, in all branches of psychology, every student in the Cognitive program is required to take **six** courses with a quantitative or formal emphasis, which can include the required statistics sequence (Psych 450, 451, and 453). Which specific courses are most appropriate for a given student will depend both on career objectives and on courses previously taken.

Since research training is a vital function of the program, students are also encouraged to engage in "Independent Study" even in their first year. Each unit of independent study counts as one course credit. Few formal courses at the graduate level are given during the summer session. Summers are used for independent work and research.

Advanced students (2nd year and higher) must present their research findings or plans at least once a year in the cognitive brownbag series. Students are also strongly encouraged to seek out opportunities for giving guest lectures in courses and conference presentations.

#### **Related Courses**

Graduate students may take other 300-level courses for credit. However, if they wish for these courses to count towards the program area's core requirement, they must petition the area director. The list of course below is not exhaustive and is subject to change.

## **Psychology**

- 450 Fundamentals of Statistics
- 451-1,2 Statistics in Experimental Design
- 453 Linear Models
- 454 Psychological Measurement

## **Philosophy**

- 325 Philosophy of Mind
- 350 Systematic Logic
- 358 Epistemology
- 454 Philosophy of Science

## Linguistics

- 305 Lexical Semantics
- 306 Fundamentals of Syntax
- 329 Pragmatics
- 454 Psychology of Hearing Impairment

## **Learning Disabilities**

- 422 Learning Disabilities in Late Childhood and Adolescence
- 424 Neuropsychology and Learning Disabilities
- 487 Reading and Learning Disabilities

## Speech and Language Pathology

- 337 Language Development and Usage
- 437 Developmental Semantics and Syntax

## 2. First Year Project

During their first year, students are expected to conduct significant empirical research in their field under the mentorship of their primary advisor. A paper reporting the results of this research is due on **August 31st** following the first year in the program. This paper is then evaluated by the student's advisor and one other member of the Area faculty, who must give formal approval before the beginning of the student's second year. The first year research is presented to the Cognitive area during the second year as the student's

Brownbag talk and serves as the foundation for the Master's thesis.

#### 3. Master's Thesis

Each student who does not have a master's degree on entering the program must write a master's thesis. This is normally a revision of the student's first-year paper, incorporating corrections and additions, as specified by the readers of the first-year paper. We strongly recommend that the finished version of the thesis receive formal approval from the student's advisor and second reader by **December 15th** of the second year. To receive the master's degree, the student must also follow the guidelines required by The Graduate School concerning when and how to file for the degree.

## 4. Third Year Comprehensive Exam/Qualifying Paper

In the third year Cognitive students must write a paper that analyzes and reviews a substantive area of cognitive psychology. The topic and the completed paper must be approved by at least two faculty members from the program faculty, including the major advisor. The paper may, but need not, form part of the background for the dissertation. The paper should be submitted to the student's faculty readers by July 31st of the third year, and the final version of the paper incorporating the readers' feedback should be completed and receive final approval by August 30th. This third year review paper serves as the PhD comprehensive qualifying exam for the Cognitive area, and completion of this milestone must be filed with The Graduate School (TGS) in order to be admitted to candidacy for the Ph.D. TGS requires that the comprehensive qualifying exam be successfully completed no later than August 30<sup>th</sup> following students' third year in the program.

## 5. Dissertation Proposal

After the student has successfully passed the Master's and the third-year paper requirement, he/she then forms a Ph.D. committee consisting of the primary advisor plus at least two other faculty members (with prior approval, committee members may be faculty outside the Psychology department). In consultation with the committee, the student is expected to prepare a written prospectus for the Ph.D. project, and to present this prospectus during an oral examination conducted by committee members. This oral examination normally covers the dissertation proposal but need not be limited to that. The oral examination must be completed, and approval for the Ph.D. project received, by August 31 of the fourth year. Completion of this milestone must be filed with The Graduate School (TGS) by this date. All other requirements must be completed before this oral examination may be taken.

#### 6. Dissertation Defense

The final oral defense covers the completed dissertation. The Ph.D. defense is normally held in the spring of the fifth year or earlier. The student must also follow the guidelines required by The Graduate School (TGS) concerning when and how to file for the completion of the Ph.D. program.

For all milestones, students must complete a TGS form to officially register completion of the milestone. See Page 34, Paperwork for The Graduate School (TGS), for more details.

## PERSONALITY, DEVELOPMENT, AND HEALTH (PD&H)

## 1. Course Requirements

Northwestern University's Graduate School requires that all Ph.D. students take a minimum of 27 courses, which translates into 3 years of course work. Many courses may be specialized topics courses, seminars, and independent studies and research. As a program, we are committed to providing students with ample time and resources to develop their research programs through hands-on training in the lab.

Within the total of 27 courses, 15 particular courses are required for the PD&H area. The two-quarter Psychology Department Pro-Seminar sequence, as well as an ethics course, all taken in the first year, are required for all Ph.D. students in the Psychology Department. PD&H students must take 5 core courses in PD&H (4 required courses, plus one of two developmental psychology courses), 3 statistics courses, 2 additional courses from a list aimed at providing more depth in areas directly related to PD&H, and 2 courses aimed to assure intellectual breadth. Below is a listing of required courses:

*Psychology Department Requirements* 

Psych 401-1: Pro-Seminar 1: Biological and Cognitive Bases of Behavior Psych 401-2: Pro-Seminar 2: Social and Emotional Bases of Behavior

Psych 519: Ethics – Responsible Conduct of Research

Personality, Development, and Health Core Courses (all 4 required, plus one of the two developmental courses)

Psych 405: Psychometric Theory

Psych 494: Introduction to Personality Psychology

Psych 428: Health Psychology Overview

Psych 497: Biological Basis of Health Psychology

Take one of the following two:

HDSP 413: Theories of Development

Psych 488: Theories of Social and Emotional Development

**Statistics** 

Psych 453: Correlation and Regression

Psych 451: Statistics in Experimental Design

One other advanced statistics course (e.g., Multilevel Modeling, SEM)

PD&H Depth Courses (choose 2 from the following menu)

Psych 421-1: Psychopathology 1 Psych 421-2: Psychopathology 2 Psych 470: Social-Emotional Brain HDSP 402: Child Development

HDSP 404: Adult Development and Aging HDSP 413: Theories of Human Development

HDSP 415: Beyond Nature versus Nurture: The Impact of Experience on Biology

HDSP 451: Child and Adolescent Sleep: Causes and Consequences Anthropology 490: Integrative Seminar in Society, Biology, and Health

Anthropology 490: Medical Anthropology Sociology 476: Biology and Social Inquiry

\*Other courses may be counted toward PD&H Depth Courses with approval from the area.

**Breadth Courses** 

Two broad-based courses from outside the PD&H area.

## 2. Master's Degree

The qualification for the award of a Master's will be the successful completion of the first- and second-year projects.

The first-year project is to be conducted under supervision of a faculty mentor and is to be completed by the end of the summer following the first year of graduate study. Each student will present the results of the first-year project in the PD&H brownbag in the Fall quarter of their 2<sup>nd</sup> year. Final approval of the project is entirely in the hands of the faculty sponsor. The purpose of the oral presentation (Brownbag) is educational, so that the student can have the input of other faculty. No committee is necessary.

The second-year project is also to be conducted under the supervision of a faculty advisor and completed and presented by the end of the spring quarter of the second year of graduate study. Like the first-year project, final approval of the project is entirely in the hands of the faculty sponsor and no committee is required. The second-year project should be completed before June 30th of the second year, and presented at a PD&H brownbag. For the purposes of The Graduate School's (TGS) master's degree form, the faculty advisor and the PD&H area head shall provide approval signatures.

The product of each of these projects will be a manuscript suitable for submission to a journal (i.e., 20-35 pages in APA format). The research progress of each student will be evaluated at the end of every academic year.

#### 3. Comprehensive Qualifying Examination

In the third year, each student will complete a third-year project, which serves as the "Comprehensive Qualifying Examination." In almost all cases, this will take the form of a grant application such as an NRSA. When it is not a grant application, the third-year project will typically be a major literature review of the kind that may be submitted to *Psychological Review* or *Perspectives in Psychological Science*. The faculty mentor is responsible for evaluating and approving the third-year project. When approved, the student is deemed to have passed the "Comprehensive Qualifying Examination," and will be admitted to candidacy. The Graduate School (TGS) requires that admission to candidacy happen by the end of the 3<sup>rd</sup> year of graduate school (no later than August 30).

## 4. Dissertation Prospectus

After the student has successfully completed the second-year project and the comprehensive examination, he/she begins to work on a written research proposal (dissertation proposal). He/she must request the formation of a committee of 3 to conduct an oral dissertation proposal defense. Two members must be Northwestern faculty, and the third committee member can be any qualified faculty member, and can be from outside the department or even outside of Northwestern. This examination must be completed by the end of the fourth year of graduate school (TGS requires that this happen no later than August 31).

#### 5. PhD Dissertation

After completing the dissertation proposal, the student then follows the plan of the proposal and completes their research project(s). Writing of the dissertation takes place during the student's fifth year, and the written doctoral dissertation is submitted for approval to the dissertation committee. The doctoral dissertation must be defended in a final oral examination (dissertation defense), which is typically completed by the end of the fifth year.

For all milestones, students must complete a TGS form to officially register completion of the milestone. See Page 34, Paperwork for The Graduate School (TGS), for more details.

#### **SOCIAL**

#### 1. Coursework

Requirements for the Ph.D. set by the Graduate School at Northwestern include two consecutive years of full-time coursework. Three courses per quarter constitute a full-time load. Therefore, students normally take two to three courses per quarter during their first two years of graduate work and receive some course credit for supervised research. Students in the Social Area are required to take a set of core social psychology and statistics/methodology courses, but there is considerable flexibility in tailoring the rest of the required course work around each student's particular areas of interest.

At Northwestern, graduate courses are "400-level" courses (levels 100 through 300 are

undergraduate courses). Social Area students must complete at least six graduate courses in social psychology. Two of these are mandatory: Psychology 481 (Theories in Social Psychology) and Psychology 482 (Research Methods in Social Psychology). The remaining four may be chosen from among the many options regularly offered. In addition to these six social courses, students must also complete another three courses. At least two of these must be content courses outside of the social area – that is, courses offered by other areas of the Psychology Department or by other departments at Northwestern.

The following graduate social psychology courses are offered regularly:

- 430: Attraction and Relationships
- 440: Self-Regulation
- 481: Theories in Social Psychology
- 482: Research Methods in Social Psychology
- 483: Social Cognition
- 485: Psychology of Attitudes
- 486: Stereotyping and Prejudice
- 489: Special Topics in Social Psychology (e.g., Motivated Cognition, Psychology of Gender, The Self, Implicit Social Cognition, Cooperation and Prosocial Behavior).

Students are also required by the department to take a full year of statistics (three courses, typically Psychology 450, 451, and 453). Most students take additional statistics courses and practicums in topics like teaching, grant-writing, and research communication, and these are highly encouraged. However, such courses do not count toward the two outside-area courses required for Social Area students. Finally, during their first year, students are required by the department to take (a) two quarters of a department-wide proseminar designed to introduce students to the field of psychology as a whole and (b) an ethics training sequence during a third quarter (Psychology 519).

In addition to enrolling in courses, students may receive course credit for independent, supervised research (Psychology 499) as part of a full-time load. This may only account for one credit per quarter during the first year of study, but may account for two credits in later years. A typical sequence for completing all of the required course work during one's first two years in the program is outlined in the chart below. However, it is not uncommon for schedules to deviate based upon the availability of particular courses and for students to finish some of the required course work during the third year. Also, it should be noted that this schedule reflects the minimal requirements for coursework, but students frequently take additional courses beyond the minimum, particularly in Year 2.

#### Year 1

FallWinterSpringProseminarProseminarEthics CourseStatistics CourseStatistics CourseStatistics Course400-level Seminar2 x 400-level Seminars

400-level Seminar + Psych 499

## Year 2

Fall Winter Spring

2 x 400-level Seminars 2 x 400-level Seminars 2 x 400-level Seminars

Psych 499 Psych 499 Psych 499

Within the framework of these basic requirements, students are free to develop a program of coursework that suits their particular career and research aspirations. Beyond the offered Psychology courses, relevant graduate courses may be offered by the Departments of Anthropology and Sociology, the School of Communications, the School of Education and Social Policy, and the Kellogg Graduate School of Management (particularly the Marketing and the Management and Organization Departments). These often (but not always) may serve as outside-area courses. In very special cases, a unique 300-level undergraduate course may also be substituted for a graduate course. Before enrolling in undergraduate courses or courses in other departments, prior approval is required from one's advisor and the head of the Social Area, who will consult with the other faculty in the area in reaching a decision.

#### 2. First Year Research

The program is designed to introduce new students to psychological research from the outset of their involvement in the program. Students work closely with their advisers to develop a first-year research project during their first quarter of graduate school. They are expected to take an active role in planning and executing this project, and they typically present their findings in an informal "brownbag" presentation at the end of the first year.

They are also required to submit a publication-style article based on this research to their adviser by the end of the summer following their first year.

#### 3. Master's Thesis

Students are also required to write a master's thesis reporting original research conducted by the student under the guidance of a master's committee that is normally chaired by the student's primary academic advisor. This research may develop the themes presented in the first-year project, or it may concern an entirely different topic. The master's thesis committee consists of at least two members of the graduate faculty, one of whom is the student's primary faculty adviser. Thesis research is typically conducted during the second year of graduate study. In contrast to the dissertation, the master's thesis does not require an initial proposal. Students conduct the research and write the thesis under the guidance of the advisor and submit a written document to the masters committee, who will also conduct an oral examination. Students should complete the Master's thesis, including the oral examination, before the end of their second year of graduate study.

## 4. Comprehensive Qualifying Examination

To become candidates for a doctoral degree, students must pass a written comprehensive qualifying examination that tests their knowledge of core issues relating to research and theory in social psychology. This examination is normally scheduled to follow completion of the Master's degree requirements and the core coursework. A reading list is distributed toward the end of spring quarter of the second year, allowing students to spend that summer reading and preparing for the exam. From this foundation of knowledge, the comprehensive exam provides students with an opportunity to demonstrate the depth and breadth of their knowledge of the field. The examination itself has two components, a timed and a take-home portion. The timed portion lasts four hours and follows a closed-book short-answer format. The take-home portion lasts a week and follows an open-book essay format. This exam takes place in the late summer following the student's second year. The Graduate School (TGS) requires that all students be admitted to candidacy (which includes passing the comprehensive qualifying exam) no later than August 30 following their third year in graduate school.

## 5. PhD Dissertation Proposal

The final program requirement is the completion of a doctoral dissertation reporting original research conducted by the student under the guidance of a dissertation committee that is normally chaired by the student's primary academic advisor. The dissertation committee consists of four members of the graduate faculty, at least one of whom must come from outside the social area faculty. The first formal step in the dissertation process is a written proposal ("prospectus") that includes a comprehensive literature review, theoretical discussion, and the method for the proposed research. The proposal is written sometime during the third and/or fourth year, and students must defend it in an oral examination administered by the dissertation committee. The proposal defense must take place by the end of the fourth year of graduate study, and all other degree requirements must be completed prior to the defense. TGS requires that all students have their dissertation prospectus approved no later than August 31 following their fourth year in graduate school.

#### 6. PhD Dissertation

Writing of the dissertation takes place during the student's fifth year, and the complete doctoral thesis must be defended in a final oral examination, which is typically completed by the end of the student's fifth year. The date of the examination must be early enough to allow the student sufficient time make any necessary revisions and submit the completed dissertation and all supporting materials to TGS by the graduation deadline the student is intending to meet (see TGS's Web site for the deadlines in a given year).

For all milestones, students must complete a TGS form to officially register completion of the milestone. See Page 34, Paperwork for The Graduate School (TGS), for more details.

## Sketching out the Path to the Ph.D. in Psychology

[Note that clinical students will have slightly shifted timelines – see Area Milestones.]

## Year 1

Full-time enrollment in classes (including prosem, ethics, and stats). Involvement in research with advisor.

TA 2 courses (clinical: 3TAs)

## Year 2

Full-time enrollment in classes.

M.A. research project completed in the second year.

TA 2 courses (clinical: 1TA)

## Year 3

Full-time enrollment in classes. The student has typically met the full-time residency requirement and now enrolls in TGS 500 plus any additional courses as needed to fulfill program requirements.

Comprehensive Qualifying Exam/Paper completed by end of third year. TA 2 courses

## Year 4

The student is now in candidacy.

Dissertation proposal defended by end of fourth year.

TA 2 courses

## Year 5

The student works on and ideally completes dissertation.

Dissertation defense by end of fifth year.

TA 1 course

## INFORMATION FROM THE GRADUATE SCHOOL (TGS)

## **Doctoral Residency**

Eight quarters of residency to be completed consecutively. Most students who have been continuously enrolled in full-time work for the first two years, including summers, will meet the residency requirement by the first quarter of their 3<sup>rd</sup> year (quarter nine).

## TGS 500 – "Advanced Doctoral Study"

Available to doctoral students who have completed the residency requirement of eight quarters of full-tuition registration within their program, and are receiving aid from the University. Provides full-time status, but allows no accumulation of graded course credit or credit toward the Doctoral residency requirement described above (although it does provide "continuous registration"). Students in years 3 and higher typically enroll in one to three units of TGS 500, depending on whether or not they are continuing to take courses (see "Advanced Year Registration below).

## **Advanced Year Registration**

PhD students who have reached advanced status (quarters nine and above) are allowed to take additional course units as approved by their program of study. No additional tuition will be charged (see the term pricing policy for details).

Students in quarters nine through twelve may have additional course requirements to complete in their program and may register for up to four units. Students who register for less than three units of coursework in a given quarter must also register for TGS 500 to achieve full-time status. All course requirements for a program must be completed by the end of the twelfth quarter. Students in quarters thirteen and above may register for nonrequired coursework in addition to TGS 500.

#### **Part-Time Study**

PhD students typically register full time for every quarter. In rare and exceptional circumstances, PhD students may be able to register part time. Such exceptions must be approved by the Dean of The Graduate School after consultation with the program.

## **Consecutive Residency**

All doctoral students must be registered at Northwestern University in each of the fall, winter and spring terms until all degree requirements have been completed, including dissertation submission to The Graduate School. Unfunded students who are not on campus, but still enrolled in the program--for instance, clinical students on their Internships-- should register for TGS 512 in order to fulfill this requirement.

## **Residency and Transfer Credit**

No residency credit will be awarded by The Graduate School for work completed in a graduate program outside of The Graduate School. Individual programs may waive course requirements based on work completed at another institution (either prior to or after enrollment at Northwestern), but all students must complete nine graded courses in The Graduate School and maintain a B average (3.0 GPA). Students may register for TGS 500 (funded) or TGS 512 (unfunded) within their programs to maintain full time registration during quarters in which they are not enrolled full time in graded coursework.

#### **Summer Session**

Summer registration is required for doctoral students in quarters four through eight (i.e., in the first two years). Unfunded students (students without any stipend or tuition scholarship) in quarters nine and above are not required to register during the summer.

## **P/NP** Grading

Students will follow individual program requirements regarding graded coursework. Courses may be taken Pass/No Pass (P/NP) only when this grading basis is available for selection in CAESAR. No individual exceptions will be allowed.

## Good Academic Standing, Probation, and Exclusion Policies

Cases of improper academic and/or research conduct, and inappropriate or unprofessional behavior are considered outside the boundaries of "satisfactory academic progress". These cases are covered separately under TGS's <u>Academic Integrity policy</u>, as well as the published policies of the <u>Office for Research Integrity</u>, the <u>Office of Equal Opportunity and Access</u>, and the <u>Student Handbook</u>. These cases are addressed according to the University's existing disciplinary procedures, and may result in a range of sanctions up to and including exclusion from the University.

## **Good Academic Standing**

To be in good academic standing in The Graduate School, a student must meet both the standards set by the degree program in which the student is enrolled and those set by The Graduate School. The student must make satisfactory progress toward fulfilling all requirements for the degree as set forth by the applicable degree program and by The Graduate School (see the previous section of this handbook).

## **Probation**

A student whose overall grade average is below B (3.0 GPA) or who has more than two incomplete grades will be placed on probation by The Graduate School and will not be in good academic standing. A student who fails to resume good academic standing after being placed on probation by The Graduate School, who fails to make satisfactory progress toward the degree in accordance with the requirements adopted by the program or The Graduate School, or who

otherwise fails to meet the requirements set by the degree program or The Graduate School may be excluded (i.e., expelled) from The Graduate School.

## **Unsatisfactory Academic Progress**

Failure to make satisfactory academic progress, as determined by the program, may be a result of (but is not limited to): unsatisfactory performance in classes, unsatisfactory performance on qualifying exams, unsatisfactory research progress, unsatisfactory performance as a TA, or failure to meet other program requirements (such as language proficiency). At a minimum, a student's failure to make satisfactory progress must be reported by the student's program to the student, as well as to TGS, in the semi-annual academic progress reports.

## **Exclusion**

Exclusion is defined by the University in the <u>Student Handbook</u>. The decision to exclude a student from a program can be made on the basis of the student's failure to remain in good academic standing. Prior to exclusion a student should have reasonable opportunity to remediate the deficiency. Exclusion always requires approval from both the program chair and the Director of Graduate Study. The Graduate School will move to exclude a student if he or she is shown not to be in good academic standing in two consecutive annual academic progress reports.

## **Notification of Exclusion**

When a decision to exclude is made, both the student and TGS must be informed in writing within three business days of the decision. The notification must include the effective date of the exclusion, a clear statement of the reason(s) for exclusion and any relevant documentation.

## **Appeal Process**

Students wishing to appeal a program's decision to exclude must first appeal directly to the program. The program must inform both the student and TGS of the outcome of the student's appeal(s) in writing.

A student may appeal program decisions to The Graduate School. Appeals will only be considered by TGS on the basis of procedural errors or failure to comply with established program or TGS policy. The Graduate School will not consider appeals based on academic decisions.

Appeals to The Graduate School must be made in writing within ten days of the program's final written determination of exclusion and include any supporting materials at that time. The Dean of The Graduate School will determine if an appeal should be administered within TGS, UHAS (University Hearing and Appeals System), or other sanctioning body within the University.

The Dean may request additional information from, or a meeting with, the student and/or program before making a final decision. The Dean's decision will be made in a timely manner, and will be communicated in writing to the student and program. This decision is final and cannot be further appealed.

## Paperwork for The Graduate School (TGS)

Paperwork involves the timely submission of online documents to the Graduate School. Students who are completing their degree will complete the following forms: (1) Masters Completion Form; (2) PhD Qualifying Exam Form; (3) Prospectus Form; (4) Final Exam Form; (5) Application for Degree; (6) NRC Survey of Earned Doctorates; (7) Online submission of dissertation via UMI ProQuest.

The *Master's Degree Completion Form* must be completed using TGS Forms in CAESAR and approved by the department graduate assistant. A minimum of two individuals must serve on the Master's exam committee. At least two members of this committee, including the chair, must be members of the Northwestern University Graduate Faculty. A student is not eligible to receive the master's degree unless this form is submitted via CAESAR and all Change of Grade forms are submitted to The Graduate School by the date specified in the Academic Calendar.

The *Ph.D. Qualifying Examination Form* is approved and submitted online via CAESAR by the department graduate assistant. Following the completion of the Qualifying Exam (and all other relevant program requirements), students will be admitted to candidacy.

The *Ph.D Prospectus (dissertation proposal) Form* is submitted through TGS Forms in CAESAR. A minimum of three individuals must serve on the dissertation committee. At least two members of this committee, including the chair, must be members of the Northwestern University Graduate Faculty.

The *Final Examination Form* is approved and submitted online via CAESAR by the department graduate assistant. A minimum of three individuals must serve on the final exam committee. At least two members of this committee, including the chair, must be members of the Northwestern University Graduate Faculty. Check the Academic Calendar for the last date you may submit this.

For more information regarding the Application for Degree, NRC Survey of Earned Doctorates, and Online submission of dissertation via UMI ProQuest please refer to The Graduate School's web page (<a href="https://www.tgs.northwestern.edu/about/policies/phd-degree-requirements.html#filling">https://www.tgs.northwestern.edu/about/policies/phd-degree-requirements.html#filling</a>)

## **Timeline**

Graduate Faculty legislation states that *all requirements for the doctoral degree must be met within nine years of initial registration in a doctoral program.* 

If a student takes a leave of absence or does not register for summers in quarters one through eight, the Tuition and Registration timelines will be delayed accordingly, but not the Milestones timeline, unless other arrangements are made with TGS.

|            | Tuition model                                     | Registration                         | Milestones to be achieved   | Forms to be completed |
|------------|---|--------------------------------------|---|-----------------------|
| Year One   |   |                                      |   |                       |
| Q1- Fall   |   | 3-4 units of<br>coursework<br>or 590 | Coursework (minimum of nine graded courses). Certain areas may require more graded courses. |                       |
| Q2- Winter |   | 3-4 units of<br>coursework<br>or 591 |   |                       |
| Q3- Spring |   | 3-4 units of<br>coursework<br>or 592 |   |                       |
| Q4- Summer |   | 3-4 units of<br>coursework<br>or 593 |   |                       |
| Year Two   |   |                                      |   |                       |
| Q5- Fall   | Full rate<br>(funding<br>typically<br>guaranteed) | 3-4 units of<br>coursework<br>or 590 | Coursework (minimum of nine graded courses). Certain areas may require more                 |                       |
| Q6- Winter |   | 3-4 units of<br>coursework<br>or 591 | graded courses.   |                       |
| Q7- Spring |   | 3-4 units of<br>coursework<br>or 592 |   |                       |
| Q8- Summer |   | 3-4 units of<br>coursework<br>or 593 |   |                       |

| Year Three     |   |                                 |   |  |
|----------------|---|---------------------------------|---|--|
| Q9- Fall       | Advanced rate (funding typically                      | TGS 500<br>and/or<br>coursework | Coursework. Students must complete all required courses and be admitted to candidacy                              | PhD Qualifying Exam<br>form (initiated by<br>department)               |
| Q10- Winter    | guaranteed)   | TGS 500<br>and/or<br>coursework | (pass their Comprehensive Qualifying Exam) by the end of the twelfth quarter.                                     |  |
| Q11- Spring    |   | TGS 500<br>and/or<br>coursework |   |  |
| Q12-<br>Summer |   | TGS 500<br>and/or<br>coursework |   |  |
| Year Four      |   |                                 |   |  |
| Q13- Fall      | Advanced rate (funding typically guaranteed)          | TGS 500<br>and/or<br>coursework | Students must complete their Prospectus (proposal of dissertation topic) before the end of the sixteenth quarter. | PhD Prospectus Form (to by approved by the department)                 |
| Q14- Winter    | gaaranteedy   | TGS 500<br>and/or<br>coursework | end of the sixteenth quarter.   |  |
| Q15- Spring    |   | TGS 500<br>and/or<br>coursework |   |  |
| Q16-<br>Summer |   | TGS 500<br>and/or<br>coursework |   |  |
| Year Five      |   |                                 |   |  |
| Q17- Fall      | Advanced rate<br>(funding<br>typically<br>guaranteed) | TGS 500<br>and/or<br>coursework |   | If finishing in Year 5: (1) Application for Degree (2) Final Exam Form |
| Q18- Winter    |   | TGS 500<br>and/or<br>coursework |   | (approved by the department) (3) NRC Survey of                         |
| Q19- Spring    |   | TGS 500<br>and/or<br>coursework |   | Earned Doctorates (4) Online submission of dissertation                |
| Q20-<br>Summer |   | TGS 500<br>and/or<br>coursework |   |  |

| Year Six- Nine |  |  |  |   |  |
|----------------|--|--|--|---|--|
| Fall           | Advanced rate<br>or Continuous<br>Registration | TGS 500 if<br>receiving<br>funding<br>TGS 512 if<br>unfunded |  | (1) Application for Degree (2) Final Exam Form (approved by the department) (3) NRC Survey of |  |
| Winter         |  |  |  | Earned Doctorates (4) Online submission of dissertation                                       |  |
| Spring         |  |  |  |   |  |
| Summer         |  |  |  |   |  |

<sup>\*</sup> Those who do not complete in 9 years must enroll in TGS 513 or TGS 500 (if international student) for the remaining quarters and pay tuition accordingly.

## Conference Travel Support

The department provides funds to help graduate students cover the costs of presenting at scientific conferences. Please refer to the 'Conference Travel Support' document on the Psychology Department website (under Current Students) for details and requirements.

The Department of Psychology reserves the right to change without notice any statement in this Handbook concerning but not limited to rules, policies, curricula, and courses.

#### Nondiscrimination Statement:

Northwestern University does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, religion, national origin, sex, pregnancy, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship status, veteran status, genetic information, reproductive health decision making, or any other classification protected by law in matters of admissions, employment, housing, or services or in the educational programs or activities it operates. Harassment, whether verbal, physical, or visual, that is based on any of these characteristics is a form of discrimination. Further prohibited by law is discrimination against any employee and/or job applicant who chooses to inquire about, discuss, or disclose their own compensation or the compensation of another employee or applicant.

Northwestern University complies with federal and state laws that prohibit discrimination based on the protected categories listed above, including Title IX of the Education Amendments of 1972. Title IX requires educational institutions, such as Northwestern, to prohibit discrimination based on sex (including sexual harassment) in the University's educational programs and activities, including in matters of employment and admissions. In addition, Northwestern provides reasonable accommodations to qualified applicants, students, and employees with disabilities and to individuals who are pregnant.

Any alleged violations of this policy or questions with respect to nondiscrimination or reasonable accommodations should be directed to Northwestern's Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, equity@northwestern.edu.

Questions specific to sex discrimination (including sexual misconduct and sexual harassment) should be directed to Northwestern's Title IX Coordinatorin the Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, TitleIXCoordinator@northwestern.edu.

A person may also file a complaint with the Department of Education's Office for Civil Rights regarding an alleged violation of Title IX by visiting www2.ed.gov/about/offices/list/ocr/complaintintro.html or calling 800-421-3481. Inquiries about the application of Title IX to Northwestern may be referred to Northwestern's Title IX Coordinator, the United States Department of Education's Assistant Secretary for Civil Rights, or both.

#### **APPENDIX**

## **TA Requirements for Graduate Students**

This document clarifies the requirements for TAing in the Psychology Department, as well as the additional incentives available to those graduate students who take on a TAship that involves substantial teaching responsibilities.

Serving as a Teaching Assistant (TA) is a vital and important role in graduate school, and is a requirement of all graduate students in the Ph.D. program. The stipend that you receive from the university is intended to support TAs in our department. Because it is a source of your funding during your graduate school years, TAing should be a top priority for all graduate students. This means that when you are given a TA assignment, you are expected to take on that assignment (even if it is not in your area) unless it conflicts with a program requirement that must be completed that year in order for you to graduate. Thus the department asks that you not change your TA assignment for reasons such as: lab meeting, a course that you would like to take, or a course that you are required to take (if it can be taken in a later year), etc. We offer a TA swap meeting once per quarter in which TAs who have a conflict with a program requirement can arrange to switch with another TA (at this meeting, if your TA assignment conflicts with a lab meeting or class you would like to take, you may inquire about the possibility of a swap, but this would be an optional, rather than necessary, swap).

The university guarantees 20 quarters of funding to every graduate student, through the summer following Year 5. This arrangement means that graduate students could be required to TA 3 quarters per year for their funding. However, the department would like to see graduate students have enough time to devote to their research, and as a result has reduced the TAing requirement to the following:

Year 1: 2 quarters

Year 2: 2 quarters

Year 3: 2 quarters

Year 4: 2 quarters

Year 5: 1 quarter

[Clinical students are shifted, and TA 3 quarters in Year 1, and 1 quarter in Year 2.]

In Year 6 and beyond, if a student has not finished, faculty may decide to put that student on a research grant. If no other funding is available, funding from the department may be granted on a case-by-case basis depending on availability and plans for finishing the program. If a student receives funding from the department in Year 6 or beyond (note that department funding beyond 6<sup>th</sup> year is highly unlikely except under extraordinary circumstances), they would typically be expected to TA.

In addition, every graduate student is required to give a class lecture at least twice during their graduate career, and to be evaluated either by the faculty instructor and/or someone at the Searle Center.

If a student receives external funding (e.g. a student is awarded an NSF, NRSA, or CIHR

fellowship), that student will receive a one course reduction in the above TA requirements for the years that they have external funding. Note that the department has chosen to "smooth out" TAing responsibilities across the years with this policy in order to allow more consistent time for research across the years (i.e., requiring 2 quarters of TAing in years where there is no external funding, and 1 quarter when a student has external funding, rather than 3 quarters of TAing in years with no external funding, and 0 quarters when a student has external funding)

TGS/WCAS currently allows students to "bank" quarters to use during their 6<sup>th</sup> year if necessary. For instance, if a student received three quarters of eligible external funding in years 2-5, they may receive three quarters of departmental funding in their 6<sup>th</sup> year. Banked quarters may not be used beyond 6<sup>th</sup> year. Further, because TA reductions are given during the quarters in which a student receives external funding, they are typically asked to TA in their 6<sup>th</sup> year even if they use their banked quarters (which is essentially department funding). The exact number of TA quarters will depend on multiple factors including the student's funding history, the department's financial status, and the TA needs for the undergraduate courses that we offer.

Students may receive supplemental income by teaching SPS (School of Professional Studies) classes in years 2-5. If a 6<sup>th</sup> year student taught an SPS class, the department would top-up their earning to be equivalent to the regular stipend level for that quarter. Thus, SPS teaching provides a resource for quarterly funding to 6<sup>th</sup> year students. Note that if a student with banked quarters taught an SPS class in their 6<sup>th</sup> year, there would be no monetary gain. For example, if a student had 3 banked quarters, they would get 6<sup>th</sup> year support for the fall, winter, and spring quarter without having to teach SPS classes. Even if they chose to teach an SPS class, say in winter quarter, their stipend would remain the same.

Please direct any questions regarding TA responsibilities/assignments to Associate Chair (Ben Gorvine) and 6<sup>th</sup> year funding questions to DGS (Satoru Suzuki).