

GRADUATE STUDENT HANDBOOK
Department of Psychological and Brain Sciences
University of Iowa
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The mission of the graduate program in the Department of Psychological and Brain Sciences is to produce professional scholars whose preparation will enable them to contribute significantly to the advancement of psychological science as well as effectively teach undergraduate and graduate students about the science of psychology. Some of these scholars will, in addition, be prepared to deliver psychological services.

The graduate program is a Psychology PhD program. Although students can obtain an MA degree over the course of the program, and students from other graduate programs in the Graduate College at the University of Iowa can apply to and participate in an MA program in Psychology, the Department of Psychology does not admit students to the Graduate College whose objective is a terminal MA degree.

The Psychology PhD program is organized into three specific training areas: Behavioral and Cognitive Neuroscience, Clinical Science, and Cognition. We also offer students the option of creating their own training program, designated as the Individualized Training Track. Part A of this handbook describes the general requirements of the graduate program. Part B describes the requirements that are specific to each training area or track.

PART A: Departmental Requirements & Regulations

1. AREAS & ADVISORS

- a. *Training Area:* Students are admitted to a training area at the time that they are accepted into the PhD program. Each training area has its own set of program requirements, which are described in detail in Part B of this handbook. Changing areas may be done subject to the availability of resources, the approval of the destination training area, and the approval of the department Chairperson.
- b. *Advisor:* The PhD program is founded on the principle of learning-by-doing under the direct guidance of an established scholar. A student's advisor (a member of the department faculty who has agreed to advise and sponsor the student) has both the immediate and the ultimate responsibility for helping the student to develop intellectually and professionally. Each student must therefore have an advisor at all times. Exceptions to this include when an advisor has not been selected prior to beginning graduate work or when an advisor leaves the department. In these cases, the coordinator of the student's training area becomes the student's *de facto* advisor. Then in consultation with that person and others, the student must secure an official advisor within a reasonable amount of time, which should be a week or two, but no longer than a month. A student may change advisors at any time.
- c. *Research Advisory Committee:* Each student must establish a Research Advisory Committee (RAC) sometime before the end of the first semester of the program. (Note: Some training areas require that RACs be established earlier in the semester. See Part B of this handbook for details.) The RAC composition must adhere to the following rules:
 1. The RAC must consist of three faculty

2. Two of the faculty must be tenure-track faculty at the University of Iowa
3. Two of the faculty must have a 50% or greater appointment in the Department of Psychological and Brain Sciences.

The role of this committee is to provide advice and feedback to the student regarding his or her research and progress within the program. Details regarding how and when students form and interact with their RACs, and when they are dissolved to be replaced by other advisory committees (e.g., comprehensive exam and/or PhD committees) differ across training areas and are discussed in Part B of this handbook.

2. RESEARCH REQUIREMENTS

Research experience is the most important component of graduate training in this program. Students are expected to be actively engaged in research at all times. Research performance and promise are the primary criteria in evaluating progress toward the PhD.

- a. *First-year Project and Report:* Students are required to complete a first-year research project and submit a written report of that project. Details regarding the timing and the nature of the report vary across training areas and are discussed in Part B of this handbook. Quality of the first-year project and report are components of the second-year review process (see Section 5.a regarding second-year review).
- b. *Graduate Research Symposium:* Early in the Spring semester of the second year in the program, students will present a conference-style talk (usually fifteen minutes plus time for questions) describing their research to the assembled department at the annual Graduate Research Symposium. This talk provides experience with communicating research results as well as an opportunity for students and faculty to learn about research going on throughout the department. Performance at the Graduate Research Symposium is a component of the second-year review process.
- c. *Comprehensive Exam:* Following successful completion of the second-year review, each student must take a comprehensive exam. The details of the exam and its timing differ across training areas and are discussed in Part B of this handbook. A formal request for the comprehensive exam must be submitted through the training-area coordinator and the department Chairperson to the Graduate College at least three weeks in advance of the oral exam defense. Per requirements of the Graduate College, students must be registered in the Graduate College at the time of their defense of the comprehensive exam. Thus, students may incur additional costs for defending during the summer and should consult the [Graduate College website](#) or the departmental administrator who handles these issues.
- d. *PhD Committee:* Each student must form a PhD committee that will oversee the completion of the dissertation. Details regarding the composition of this committee, when it is formed, and its role in the process vary across training areas and are discussed in Part B of this handbook.
- e. *Prospectus:* Some training areas require a separate written prospectus and oral defense. For other areas, the comprehensive exam and prospectus are merged. See part B of this handbook for details.
- f. *Dissertation:* Each student will produce a written dissertation. Details regarding the format of the dissertation document are discussed in Part B of this handbook.
- g. *PhD orals:* A formal request for the PhD final exam must be submitted through the training-area coordinator and the department Chairperson to the Graduate College at least three weeks in advance of the exam. The student is responsible for getting a copy of the dissertation to the PhD Committee members at least two weeks in advance of the exam, unless specified otherwise by the area (see Part B). The exam is an oral defense of the dissertation that

includes critical questions about the purpose, method, and results presented in the dissertation and intense questioning on areas of knowledge consistent with the context of the dissertation. The exam is unsatisfactory if two committee members rate it to be so. In this case, the exam may be repeated once on the recommendation of the committee and the training-area faculty.

- h. Composition of Comprehensive Examination and Prospectus/Dissertation Committees:* The composition of these committees must follow a specific set of rules. We have combined the Graduate College and PBS requirements to streamline these rules into the following:
1. The comprehensive and final examinations are conducted by committees of no fewer than **four** members of the Graduate Faculty appointed by the dean upon recommendation of the major department or program
 2. At least three of the faculty members must be members of the University of Iowa tenure-track faculty (appointment codes FS11-13 and FT11-13).
 3. Three members of the committee must be 50% or greater appointments in the Department of Psychological and Brain Sciences and, of those three, at least two must belong to the tenure-track faculty.
 4. All committees are permitted to have an additional member but no more than five faculty will be permitted on a committee.

3. COURSE and CREDIT REQUIREMENTS

Coursework provides some of the background and skills that students will need to be effective in their professional lives. For graduate work, passing a course entails receiving a grade of B- or better.

Course curricula have been designed by each of the training areas to accommodate the specific needs of students within those areas. They include required training in statistical and other quantitative methods, core-area content, and further enrichment through breadth and/or depth. Details regarding course requirements differ across training areas and are therefore discussed in Part B of this handbook.

Required coursework is only one means by which students acquire necessary background content and skills. Students are expected to actively seek out necessary content and training through independent reading, individual consultation with appropriate faculty, supplemental coursework and workshops, and related activities. Students should seek guidance from their advisors and committees regarding these opportunities, but it is ultimately each student's responsibility to continually seek out and acquire necessary and helpful content and skills.

Although most specific course requirements are defined by training areas, the following requirements apply to all students in the program.

- a. Training in the responsible conduct of research:* There are many aspects of conducting research responsibly. In recognition of this, major granting agencies (e.g., NIH) have instituted a requirement of formal training in this topic, and the Graduate College at the University of Iowa has implemented a specific requirement in answer to that requirement. All students who are engaged in research in the department must complete a 1 semester-hour (s.h.) course on this topic before the end of their first year in the program. The department has integrated this training into its new-student orientation program most of which occurs just before the start of classes of the fall semester their first year. New students must register for PSY:7270 (1 s.h.) in the fall term of their first year. If a student fails to complete the

training, he or she may be ineligible for support through University administered assistantships. In addition, NIH requires “refresher training” every four years. Students who are “due” for refresher training will receive notification and be asked to take the PSY:7270 course again.

- b. *Total credits:* Each student must complete a minimum of 72 s.h. of graduate work to receive a PhD. Of those, at least 39 s.h. must be earned while registered in the University of Iowa Graduate College. Many of the 72 s.h. will be completed through registered research credits (e.g., PSY:7110 and PSY:7130). A maximum of 16 semester hours of PSY:7130, *PhD dissertation* credit, can be counted toward the 72 s.h. requirement. Be sure that you register for the correct level of research credit, contingent on your stage in the program. If you are uncertain of what specific course number you should register for in a given semester, consult with your advisor or area coordinator.
- c. *Final term enrollment:* Each student must be enrolled during the session in which the degree is to be conferred. Thus, students may incur additional costs for graduating during the summer and should consult the [Graduate College website](#) or the departmental administrator who handles these issues. Doctoral candidates who have completed all work except the final examination may register for GRAD:6003 Doctoral Final Registration in the term during which he or she defends his or her dissertation. Registration in GRAD:6003 may be repeated if the student does not actually finish during the intended semester.
- d. *Graduate College rules and regulations:* We have attempted to summarize Graduate College requirements, as they are most directly relevant to students in our program. Students are advised, however, to consult the Graduate College *Manual of Rules and Regulations* for details of these and other details at the Graduate College level: <http://www.grad.uiowa.edu/graduate-college-manual>.

4. TEACHING

It is important for every PhD student to become an effective teacher, whether or not teaching is expected to be an explicit part of his or her professional career.

Students are expected to participate in some form of teaching activity. Examples of such activities include, but are not limited to, teaching assistantships, teaching a course during the summer, and supervising undergraduates in the lab. Students are encouraged to take advantage of the resources provided by the Center for Teaching (<https://teach.its.uiowa.edu/organizations/center-teaching>), especially in the early stages of their teaching experience.

5. ACADEMIC STANDING

There are multiple evaluation procedures built into the PhD program. These are designed to provide students with appropriate and timely feedback regarding progress through the program. In addition to these formal mechanisms, students should be in regular communication with their advisors and committees. It is a student’s responsibility to solicit specific feedback if he/she has questions regarding standing or progress within the program.

- a. *Second-year review:* Sometime before the end of the Spring semester the progress of all second-year students will be reviewed and evaluated. This review process will take into account course work, the first-year project and report and other research activity, performance at the Graduate Research Symposium, and other aspects of program participation (e.g., attendance at departmental colloquia and brown bags) as well as performance in teaching assistantships and/or research assistantships. Following this review, which occurs at the level of the training area, each second-year student will either (1) be invited to continue onto the next stage of the program, (2) be recommended for placement on departmental probation, or (3) be recommended for termination from the program (provided

that the student has not satisfactorily improved performance shortcomings that were previously communicated by the department in writing). In the event of termination or departmental probation, the recommendation from the training area will be considered by the Committee for Graduate Studies and finalized only with the approval of the departmental faculty and departmental Chairperson.

Students who successfully pass the second-year review are eligible at that point to receive an MA degree if they wish to file for it. An MA is not necessary for later receiving the PhD.

A student who is terminated from the PhD program at the point of the second-year review may be eligible to receive a terminal MA degree, but this is not guaranteed. The training-area faculty will make a recommendation regarding this and submit it for approval to CGS and the department Chairperson.

A student who is placed on departmental probation following the second-year review will receive a written account of what deficiencies exist and what goals must be met by when to have the departmental-probation status removed.

- b. *Comprehensive exam evaluation:* Timely feedback regarding the outcome of a student's comprehensive examination will be provided following the exam. In the event that an outcome includes "reservations," the reasons for the reservations and what the student must do by when to remove the reservations will be included in the written feedback. Students who do not pass the comprehensive exam may have the opportunity to retake it once, pending recommendation from the training area and approval by CGS and the departmental Chairperson.
- c. *Annual review letters:* Training-area faculty will evaluate the progress of each student in their area at the end of each academic year. Students will receive written summaries of these evaluations from area coordinators sometime in the early summer following the academic year. In the event that the evaluation includes concerns about the student's progress, those concerns and what the student needs to do by when to remove them will be specified in that written report, as will the consequences of failing to remove them.
- d. *GPA:* To be in good standing in the program, a student must at all times maintain a cumulative department and Graduate College grade point average of at least 3.0. If, after completing 9 s.h of graded (A, B, C, D, F) graduate work at the University of Iowa, a student's cumulative GPA drops below 3.0, the student will be placed on probation through the Graduate College. Details regarding academic standing, probation, and dismissal at the level of the Graduate College are provided in the college's *Manual of Rules and Regulation*: <http://www.grad.uiowa.edu/manual-part-1-section-iv-academic-standing-probation-and-dismissal>.

Students enrolled in research credits (e.g., PSY:7110 and PSY:7130) receive grades from their advisor for this "course". Below is a chart of the guidelines that the faculty use in determining the research grade. These guidelines are not binding but provide a framework for how to think about the grade. Students should always be in discussion with their advisor regarding their performance in research.

A. Performing excellently in the laboratory. No concerns about research progress.

A-. Performing very well in the laboratory. Only one or more minor areas identified that need to improve.

B+. Performing well in the laboratory, with the exception of one major deficiency (e.g., not spending enough time in the laboratory; insufficient quality of work or attention to detail).

B. Performance in the laboratory is minimally adequate as there are two or more major deficiencies.

B- and lower. Performance in the laboratory is inadequate and must improve quickly if the student is to achieve the next program milestone. Probation is a possibility.

Notes:

Performance in the laboratory can also include meeting program milestones, both in terms of quality and on-time completion (e.g., the first-year project and presentation).

A+. This grade should be assigned only when there are no concerns about research progress and a student's performance in that semester is truly exceptional (e.g., major paper published).

- e. *Participation:* To be in good standing, a student must be a regular participant in the research, teaching, and service activities of the department (as described in Part C: Guide to Student Life).
- f. *Reasonable progress:* To be in good standing, a student must maintain reasonable progress toward completion of the PhD. A student who adheres to the time line described in this handbook is automatically considered to be making reasonable progress. Beyond that, reasonable progress will be judged by the student's advisor, training area, and if necessary, CGS and the departmental Chairperson.
- g. *Appropriate professional conduct:* To be in good standing, a student must conform to reasonable standards of academic and professional conduct in all activities related to teaching, research, and service functions of the department and University. This includes performance in research assistantships and teaching assistantships. Relevant standards include Chapter 15 of the University of Iowa's *University Operations Manual* and "Professional Conduct and Academic Responsibility" and "Ethical Principles of Psychologists" of the APA.

6. PROCEDURES

- a. *Petitions:* Requests for waiver or deferment of a requirement may be submitted in writing to the coordinator of the student's training area, giving the justification for the request. Training areas act on requests pertaining to their own rules. In a case that the petition pertains to a general requirement that is described in Part A of this Handbook (i.e., a general program requirement), the petition will be considered by CGS and, if necessary, the departmental Chairperson.
- b. *Appeals and Grievances:* The outcome of a decision made by a faculty member or a faculty committee, can be appealed by communicating through the following network. Normally, the matter should be discussed first with the coordinator of the student's training area, followed if necessary with the Director of Graduate Studies and, if further necessary, the department Chairperson. If the student's grievances cannot be resolved through discussion, a written request for a review of the action should be sent to the Chairperson for presentation to the faculty. The letter should outline the student's grievances in reasonable detail. The Chairperson may appoint, in consultation with the student, a committee of three faculty and two graduate students to investigate the situation. The committee will provide an evaluation of the situation and make recommendations to the Chairperson. The Chairperson shall bring the student's appeal and the reviewing committee's recommendation to the faculty for reconsideration. If the student's grievances involve the Chairperson, the same procedures will be followed with a member of the Faculty Advisory Committee who is not involved in the grievance replacing the Chairperson in the above sequence. If, after the preceding steps have been taken, the student still feels there has been unfairness or procedural irregularity, the student may request a review by the Graduate College, recognizing that questions involving judgment of performance will not be reviewed beyond the departmental level.

- c. *Departmental probation and dismissal:* If, at any time, a student is determined not to be in good standing by the student's training area or by the Committee on Graduate Studies, the procedures of the Graduate College regarding probation and dismissal will be applied (see Section IV, paragraph E of the *Manual of Rules and Regulations of the Graduate College*: <http://www.grad.uiowa.edu/manual-part-1-section-iv-academic-standing-probation-and-dismissal>).
- d. *Notification:* Any action or evaluation affecting a student should be promptly and clearly communicated to both the student and the Director of Graduate Studies and described in a written report for inclusion in the student's file.
- e. *Feedback:* A student may request to be reviewed by his or her training area at any time. Such a review should provide frank and specific feedback regarding the student's performance and prospects as determined by the criteria that will be applied in the student's next official evaluation.

The MA Program

The graduate program in Psychology is primarily a PhD program. The program does not admit students who have a terminal Master's degree in Psychology as their objective into the Graduate College. Students in good standing in the Psychology program may elect to receive a Master's degree at the end of the second year. Additionally, students who are terminated from the Ph.D. program may elect to switch to the MA program. In both cases, the degree is an MA without thesis. This section describes the guidelines for that program.

1. GENERAL

- a. *Advisor:* Each student must have an advisor (a member of the department faculty who has agreed to advise and sponsor the student) at all times.
- b. *Academic standing:* To be in good standing, a student must maintain a cumulative department and Graduate College grade point average of at least 3.0, must receive generally good or excellent evaluations of performance in individualized instruction registrations and, if applicable, assistantship appointments. In addition, the student must meet the 'reasonable progress' and 'appropriate professional conduct' requirements of the PhD program.
- c. *Procedures:* The procedures of the PhD program regarding petitions, appeals and so on apply as well to students in the MA program.

2. MA REQUIREMENTS

- a. *Specific course requirements:* Each student must satisfy a portion of the course requirements of the PhD program. The MA requirements are organized around training area. For the MA, the student must have completed the coursework that would normally be expected by that point in the program, according to the training area's required/recommended coursework. Exceptions must be approved by the area coordinator and director of graduate studies. Each area's coursework requirements are described in Part B of this handbook.
- b. *MA without a thesis:* A student seeking an MA without a thesis must successfully complete at least 37 semester hours of graduate work including 30 hours at the University of Iowa and at least 15 semester hours of courses and seminars (not including individualized instruction) in the Department of Psychological and Brain Sciences or meet area-specific requirements for one of the training areas. The Master's without a thesis does not require a final exam

VISITING SCHOLARS

Within the limits of available resources, the department will try to provide accommodations for graduate students in good standing from another university who wish to spend a period of time here in scholarly pursuits. This includes students participating in the CIC Traveling Scholar program as well as others under less formal arrangements. The only requirement is that there be a member of our faculty who is willing to be the student's sponsor.

For information regarding the CIC Traveling Scholar program, see Section III of the *Manual of Rules and Regulations* of the Graduate College.

PART B: TRAINING AREA SPECIFIC INFORMATION

The graduate program in Psychology, administered through the Department of Psychological and Brain Sciences, includes three primary training areas: Behavioral and Cognitive Neuroscience, Clinical Science, and Cognition. Students are admitted to the PhD program through one of these training areas. Although the PhD is defined according to a general set of requirements, each training area specifies the details of those requirements. This section describes the specifics of the PhD program for each of the three training areas.

BEHAVIORAL AND COGNITIVE NEUROSCIENCE TRAINING AREA

1. GENERAL FOCUS

The Behavioral and Cognitive Neuroscience (BCN) area focuses on identifying the principles and mechanisms that govern cognition and behavior through the application of behavioral and biological research methodologies.

2. FACULTY

The primary faculty in the BCN training area are Bengi Baran, Bruce Bartholow, Mark Blumberg, Ece Demir-Lira, John Freeman, Kai Hwang, Jiefeng Jiang, A. Kim Johnson, Dorit Kliemann, Ryan LaLumiere, Isabel Muzzio (area coordinator), Jason Radley, Daniel Tranel, Michelle Voss, Edward Wasserman, and Jan Wessel. The secondary faculty are Ted Abel, Carrie Figdor, Bob McMurray, Toby Mordkoff, Krystal Parker, Lane Strathearn, James Traer and Shaun Vecera.

3. RESEARCH REQUIREMENTS

- a. *Research Advisory Committee and meetings:* Before the end of the first semester here, each student, in consultation with his or her advisor, must select a Research Advisory Committee (RAC) consisting of the advisor and two other faculty. The membership of a RAC may be modified at any time. The committee must meet as a group with the student at least once a semester until the student has formed a dissertation committee.

To verify that the student met with the committee, the student must provide documentation of the meeting to the departmental secretary by the first day of the last week of classes (a form is available for this purpose on the departmental internal website, but any reasonable documentation will suffice). This documentation must be initialed by the student and the committee members, verifying that an actual face-to-face meeting took place. If documentation is not provided, the student will receive a grade of Incomplete for his or her research registration; the Incomplete will be replaced by a letter grade as soon as a meeting occurs and documentation is provided. The role of this committee is to be a source of advice and feedback to the student and of informed input to any faculty group that evaluates the student.

- b. *First-year project report:* By the second Monday at 5pm following Thanksgiving break of their second year, students—including those who have entered with Master's degrees—must turn in a research progress report (in APA style) describing a research project that they have performed during their time in our graduate program. This report should include the scientific rationale of the project and the methods used as well as any results obtained to date, and what they mean. If data collection is not complete, the document must clearly indicate how much is left to do, and must specify a timetable for completion of the project. An electronic copy of this report should be sent to the Director of Graduate Studies and all primary members of the area.

A student's initial research project may be a part of his or her advisor's ongoing research program, selected to enable the student to demonstrate progress toward competency for independent scholarship and research with a minimum of impediments. The scope of the project should be such that a substantial portion of it can be completed in a year and a half. All projects must involve working with data and the data must be subjected to appropriate analysis.

- c. *Graduate Research Symposium:* At the beginning of the spring semester, each second-year student will present a conference-style talk (usually fifteen minutes plus time for questions) describing his or her research to the assembled department in the annual Graduate Research Symposium.

This talk provides students with experience communicating research results and it provides faculty and other students with the opportunity to get to know the students with whom they do not have frequent contact and their research.

- d. *Comprehensive Examination and Prospectus*: The Comprehensive Examination and Prospectus are combined for students in the BCN training area. They are designed to assess the acquisition of both depth and breadth in the student's area of specialization within the general field of psychology, and the ability to use the research methods of the chosen discipline. The comprehensive examination is combined with the prospectus meeting in which there are written and oral portions. Students will write a document in direct relation to their proposed area of dissertation research consisting of 12-30 pages, double-spaced, exclusive of references and figures. The format of this document will traditionally contain background, rationale, hypotheses, general proposed methodologies and general expected outcomes. The written document may include preliminary data that has been collected or experiments that have been completed. These documents should be given to the chosen committee at least two weeks before the scheduled oral exam portion. The oral portion will consist of an approximately 15-20 minute student presentation regarding the background and questions to be answered with the proposed dissertation followed by questions from the committee pertaining to the student's written document, general knowledge pertaining to their area of specialization, and discussion among participants regarding the proposed questions to be answered with their dissertation as well as any update on studies in progress or completed. The oral examination will be scheduled for two hours with completion status, feedback, and suggestions to the student occurring immediately, to within one week, of the oral examination. Both the written and oral components should be completed by the end of the fall semester, and no later than the end of the spring semester, third academic year. Exceptions to the combined Comprehensive Exam and Prospectus deadline by petition to the BCN area head, and voted on by a majority of BCN faculty members, may be granted on rare occasions. The prospectus must be completed at least the semester before the final dissertation defense. The student will choose the committee chair. Committee members may be replaced during the process before the final dissertation defense.

Students are required to meet with their committee at least once per calendar year after the completion of the combined Comprehensive Exam and Prospectus. These meetings will update the committee on the student's progress and provide a formal opportunity for the student to consult with their committee members about their projects. This update should include any changes to their original written prospectus document/plan, and the proposed changes should be given to their committee prior to any prospectus update meeting. Students are encouraged to meet with the committee members individually as well throughout the dissertation process.

- e. *Dissertation and defense*: The composition of the final thesis document is at the discretion of, and in consultation with, the prospectus committee and normally consists of a background chapter or section, followed by chapters centering on an experiment, set of experiments, manuscript, or a published paper, followed by an overall discussion chapter or section. The completed written thesis must be given to committee members two weeks in advance of a scheduled oral dissertation defense consisting of two parts, typically a 45 min-1 hour public talk followed by questions from the public and committee which may be followed by a closed part which includes just the student and the PhD committee. The department will announce the defense location and time to allow attendance by the public. The exam is unsatisfactory if two committee members rate it to be so. In this case, the exam may be repeated once on the recommendation of the Dissertation Committee.

4. COURSE REQUIREMENTS

Course work is intended to provide students with a foundation of background and skills that they need to be effective in their professional lives. For graduate work, passing a course entails

receiving a grade of B- or better. See Part A of this handbook for information regarding requirements for training in the responsible conduct of research, and overall credit and course-load requirements.

There are two parallel curriculum sub-tracks within the BCN training area, each will provide a tailored training curriculum for students primarily interested in **Behavioral Neuroscience (BN)** or **Cognitive Neuroscience (CN)**. Each BCN student must select one of these two sub-tracks, in consultation with their advisor and the RAC committee. The decision should be made at the beginning of the first year's Fall semester.

I. Behavioral Neuroscience Sub-Track

- a. *Minimum course requirements:* All students in the Behavioral Neuroscience sub-track must take the following set of courses:

PSY:7270 Principles of Scholarly Integrity (1 s.h.)

PSY:5050 Quantitative Methods in Psychology (4 s.h.)

PSY:5203 Fundamental Neurobiology I (4 s.h.)

PSY:5212 Foundations in Behavioral Neuroscience (4 s.h.)

2 electives (chosen in consultation with RAC) (6-8 s.h.)

- b. *Commonly taken electives:* In addition, students in the Behavioral Neuroscience sub-track often chose to take some subset of the following set of electives. Which, if any, of these courses a student should take will be decided in consultation with the student's advisor and RAC:

PSY:5204 Fundamental Neurobiology II (4.sh.)

PSY:6230 Foundations of Learning, Memory & Cognition (3 s.h.)

PSY:5055 Mixed-Effects Modeling in Psychology (4 s.h.)

PSY:7210 Advanced Topics in BCN (3 s.h.)

PSY:6370 Principles of Neuropsychology (3 s.h.)

PSY:7020 Seminar in Cognitive Neuroscience (3 s.h.)

ACB:6252 Fundamental Neuroanatomy (4 s.h.)

PSY:5070 Programming for Psychologists (3.s.h)

Exceptions to these requirements: Petitions to request a waiver or replacement course may be submitted in writing to the BCN area coordinator giving the justification for the request. The area will vote and a simple majority will carry the vote.

II. Cognitive Neuroscience Sub-Track

- a. *Minimum course requirements:* All students in the Cognitive Neuroscience sub-track must take the following set of courses:

Responsible Research Conduct

PSY:7270 Principles of Scholarly Integrity (1 s.h.)

Statistics

PSY:5050 Quantitative Methods in Psychology (4 s.h.)

PSY:5055 Mixed-Effects Modeling in Psychology (4 s.h.)

Programing

PSY:5070 Programming for Psychologists (3.s.h)*

*Subject to Dr. Jiang's approval, students with strong programming knowledge can substitute this class with an additional elective (see below).

Cognitive Neuroscience

ACB:6252 Fundamental Neuroanatomy (4 s.h.)

PSY:5080 Foundations in Cognitive Neuroscience (4 s.h.)

b. *Elective* (3-4 s.h.)

Students in the Cognitive Neuroscience sub-track must select at least *one* elective class (*two* if PSY 5070 is to be skipped) from the following list of pre-approved options. Other courses are possible subject to RAC approval.

NSCI:5212 Foundations in Behavioral Neuroscience (4 s.h.)

NSCI:7235 Neurobiology of Disease (4 s.h.)

PSY:5203 Fundamental Neurobiology (4 s.h.)

PSY:5610 Proseminar in Cognition and Perception (3 s.h.)

PSY 6101 Cognitive Science Language Proseminar (3 s.h.)

PSY:6230 Foundations of Learning, Memory, and Cognition (3 s.h.)

PSY:6280 Structural Functional MRI Methods and Application (3 s.h.)

PSY:6370 Principles of Neuropsychology (3 s.h.)

PSY:6440 Developmental Cognitive Neuroscience (3 s.h.)

PSY:6590 Judgment and Decision Making (3 s.h.)

PSY:7150 Analyzing Neural Time Series (3 s.h.)

PSY:7150 Network Neuroscience (3 s.h.)

PSY:7610 Cognitive Neuroscience of Working Memory (3 s.h.)

PSY:7610 Eye Movements in Cognition (3 s.h.)

BME:5320 Bioinformatics Techniques (3 s.h.)

BIOS:6810 Bayesian Methods and Design (3 s.h.)

5. COLLOQUIA

In addition to the coursework described in section 4, students are expected to seek broad exposure to research in psychology through regular attendance at Departmental colloquia, including those in areas of study outside the boundaries of the BCN area.

6. OTHER

- a. *Second-year review*: Early in the spring semester, but after the Graduate Research Symposium, the BCN faculty will hold a meeting devoted to a careful evaluation of the record of each second-year student and decide whether or not the student should continue in the PhD program. If any BCN graduate student is considered to have not met the requirements of the first-year project paper and talk, maintained an appropriate graduate

GPA or underperformed in their research and/or assistantship endeavors, the training area will recommend that the student be placed on departmental probation, or terminated from the program if the student was previously placed on academic probation and failed to meet the requirements to return to good standing. To be finalized, this recommendation must be approved by the faculty as a whole and departmental Chairperson.

- b.* Master's degree: Students who have passed the second-year review and are continuing on to completion of the PhD are eligible to receive an MA degree, though it is not necessary for the PhD. A student who is terminated from the PhD program at the time of the second-year review (or any other time) may transfer to the MA program and remain in that program through the end of the subsequent term (semester or summer session) if necessary in order to satisfy the requirements for a Master's degree. Master's degree requirements through the BCN training area include the minimum number of semester hours and their distribution required by the Graduate College and the general requirements described in Part A of this handbook.

CLINICAL SCIENCE TRAINING AREA

1. General Focus

The clinical science training program, fully accredited by the American Psychological Association and the Psychological Clinical Science Accreditation System, strongly emphasizes a scientific or clinical science approach to the study of mental and physical health. The curriculum focuses on developing scholarly understanding of clinical phenomena and acquiring research skills necessary for the systematic investigation of such phenomena. Thus, it is designed for students with a strong interest in pursuing a career in clinical research. Believing that students must become familiar with clinical material and competent in the application of clinical skills in order to pursue clinical research, the program closely integrates practicum experience in the Carl E. Seashore Psychology Clinic, at the University of Iowa Hospitals and Clinics and the VA Medical Center with coursework and supervised research experience.

2. Faculty

The primary faculty in the Clinical training area are Bengi Baran, Anne Zhang (Director of the Seashore Clinic), Emily Kroska, Susan Lutgendorf, Amanda McCleery, Molly Nikolas (area coordinator/Director of Clinical Training; DCT), Susan O'Neill, Isaac Petersen, Daniel Tranel, and Teresa Treat. Secondary faculty members include Bruce Bartholow, Ece Demir-Lira, Dorit Kliemann, Ryan LaLumiere, Jodie Plumert, and Michelle Voss. In addition, the following faculty members with clinical interests have joint or adjunct appointments in the department: Natalie Denburg (joint with Neurology) and Mark Vander Weg (joint with Department of Community and Behavioral Health, College of Public Health).

3. Research Requirements

- a. *Research Advisory Committee and meetings:* In consultation with their advisor, new students must establish a Research Advisory Committee (RAC) consisting of the student's advisor and two other faculty members sometime within the first semester in the program. This committee will provide feedback and guidance regarding the student's research and other training, including input on the student's first-year project (see below). Students must meet with the RAC at least once each semester through the end of the second year. Students must also complete a check-in meeting with their RAC at the beginning of the fall semester of the second year to ensure good progress toward completion of the first-year project.
- b. *First-year project and report:* It is expected that students will have pursued at least one study—known as the “First-year Project”—in which they are the primary contributor with the assistance of their advisor. A report describing this project is due the Monday after Thanksgiving to the student's RAC and the Clinical area coordinator. The report should describe the completed research—or progress to date—in full* and outline any further work needed to complete the study other than simply increasing the sample size.

*That is, in complete APA format, with cover page, abstract, theoretical and empirical background, introduction, methods, results, discussion, references, and figures/tables as appropriate to the study.
- c. *Graduate Research Symposium:* Clinical area students must present their first-year project at the departmental Graduate Research Symposium, which is held early in the spring semester of their second year.
- d. *Other research presentations:* Clinical area students must participate in at least two research data blitzes prior to the end of their 5th year in the program. Students must also give two (~15 minute) research talks prior to the end of their 5th year in the program. An oral conference presentation can be substituted for one of the two research talks with approval

from the mentor and DCT. These different presentations may overlap (e.g., the 15-minute talk may well be an expanded version of a data blitz). These presentations also may entail sharing more preliminary ideas about a potential research project or work in progress and seeking input from the audience about a variety of issues (i.e., the presentations don't always need to focus on completed research projects).

- e. *Comprehensive examination:* The clinical comprehensive examination is described on pages 20-23.
- f. *Dissertation and dissertation prospectus:* The PhD prospectus is a proposal that describes the student's intended dissertation project. It typically includes the background and rationale for the project, the hypotheses to be tested, design of the project, data analyses that will be performed, and anticipated pattern of results. Beyond these requirements, the following principles apply to the dissertation. The work should principally represent the intellectual contribution of the student. The work should be judged as a whole to make a significant contribution to the relevant literature. The work should have coherence as a piece or program of research. The research advisor and dissertation committee members are the best judges of the merits of work that is meant to represent a dissertation.

Students must form a committee and have an approved prospectus no later than the Friday before Spring Break of their fourth year. Also, students must have an approved prospectus before applying for internship. The time required to complete a dissertation after approval of the prospectus varies, but students should typically plan for at least one year between prospectus approval and completion of the dissertation.

- g. *Dissertation committee:* The chair or co-chair of the committee must be a primary member of the clinical area. Committee membership requirements must follow department and graduate college guidelines. The PhD committee is responsible for evaluating the student's prospectus, for providing advice while the student conducts the dissertation research, and for evaluating the dissertation at the final examination. The committee is initially selected by the student, in consultation with his or her advisor, but final approval occurs just prior to the final examination and rests with the Dean of the Graduate College (final approval typically occurs automatically when the student files a request to hold the final examination). At any time prior to final approval, the student may, in consultation with his or her advisor, change the membership of the PhD Committee.

A PhD committee typically evaluates a prospectus in the context of a Prospectus Meeting, which is attended by the student and ordinarily by all members of the PhD Committee. A prospectus will be considered approved when all or all but one of the committee members have approved it. Committee members will indicate their approval or disapproval by initialing a departmental form, which will be filed with the Departmental Administrative Assistant (in the Chair's office). Approval may require multiple rounds of revisions and multiple meetings with the committee.

- h. *Dissertation defense:* A formal request for the PhD final exam must be submitted through the training area coordinator and the department Chairperson to the Graduate College at least three weeks in advance of the exam. The student is responsible for getting a copy of the dissertation to the Committee members at least two weeks in advance of the exam. The exam is an oral defense of the dissertation that includes critical questions about the purpose, method, and results presented in the dissertation and intense questioning on areas of knowledge consistent with the context of the dissertation. The exam is unsatisfactory if two Committee members rate it to be so. In this case, the exam may be repeated once on the recommendation of the Committee and approval of the full faculty.
- i. *Clinical internship:* The accreditation criteria require that a one-year (or two-year half-time) clinical internship precede the awarding of the doctoral degree. Students in the clinical program must be on track to complete all academic course work and have an approved

prospectus no later than October 15 of the year in which they apply for internship in order to be certified as eligible for internship. Further, students are strongly encouraged to complete their dissertation before beginning their internship if at all possible. However, the faculty recognizes that in some instances the final stages in the preparation of the dissertation must be completed during or after the internship. In any event, only when the Ph.D. Final Examination has been completed satisfactorily and when the department has received from the internship agency a letter certifying the successful completion of the internship will the department recommend the student for the award of the Ph.D. degree with a “Clinical Psychology” subtrack designation on the official University transcript. Students are required to apply to and enter only APA-approved internship programs.

4. Course and Clinical Requirements

Course work is intended to provide students with a foundation of background and skills that they need to be effective in their professional lives. For graduate work, passing a course entails receiving a grade of B- or better. See Part A of this handbook for information regarding requirements for training in the responsible conduct of research, and overall credit and course-load requirements. The following information concerns requirements that are specific to students in the Clinical training area.

- a. *Content course requirements:* In their first year, students in Clinical take PSY:7310 Seminar: Orientation to Clinical Research. Additionally, students must take PSY 5320 Descriptive Psychopathology (offered fall of odd years), PSY 5330 Principles of Psychological Assessment (offered spring of even years), and PSY 6340 Psychological Therapies (offered fall of even years).

Additionally, are required to complete training experiences to fulfill their Discipline Specific Knowledge requirements under APA accreditation. These requirements involve completion of at least one course or complete relevant training experiences in each of the following areas: ethics, history and systems of psychology, cognitive aspects of behavior, affective aspects of behavior, social aspects of behavior, biological aspects of behavior, and developmental aspects of behavior. Students must also take one course or participate in a training experience that integrates at least two of these discipline-specific knowledge areas. Additionally, students must also complete one workshop offered through the Building University of Iowa for Leadership in Diversity program (or equivalent specialized training in individual and cultural diversity) during their time in the program.

Students may complete these requirements in several ways. Instruction in ethics is incorporated into seminars, core courses, clinic rounds, and supervision, so students can expect to fulfill their ethics requirement through these training experiences (and without having to take another course). Affective bases of behavior is also infused into the core curriculum without having to take another course. For more information, please see Appendix A: *Core Requirements for PhD in Clinical Science*, p. 28 and Appendix B: *Requirements Checklist for Clinical Science Program* p. 30). Revisions to APA accreditation requirements or their interpretation change from time to time, so there may be changes to APA requirements that occur after your matriculation into the program.

- b. *Statistics:* Students in the clinical area are required to establish competence in statistics equivalent to that obtained by successful completion of PSY:5050 Quantitative Methods in Psychology or BIOS:5110/4120 Introduction to Biostatistics, and PSQF:6244 Correlation & Regression or BIOS:5120 Design & Analysis of Biomedical Studies or PSY:5055 Mixed-Effects Modeling in Psychology; a third advanced course in an area relevant to the student’s research goals and interests (e.g., Structural Equation Modeling, Meta-analysis, Longitudinal Data Analysis) is strongly recommended. Students who wish to deviate from this sequence must receive the approval of the clinical-area faculty.

- c. *Clinical Practicum*: Each student in the clinical program must, prior to entering an Internship, develop an appropriate level of competence in clinical skills. Under normal circumstances, students enroll in the following:

	Fall Term	Spring Term	Summer
Year 1	PSY:7350 0-1 sh	PSY:7355 1-2 sh	PSY:7355 1-3† sh or no registration*
Year 2	PSY:7355 2 sh	PSY:7360 2 sh	PSY:7360 1-3† sh or no registration*
Year 3	PSY:7360 1-2 sh	PSY:7360 1-2 sh	PSY:7360 1-3† sh or no registration*
Year 4	PSY:7360 1-2 sh PSY:7370 1-2 sh	PSY:7360 1-2 sh PSY:7360 1-2 sh	PSY:7360 1-3† sh or no registration* PSY:7370 1-3† sh or no registration

†students on fellowship; *students not on fellowship

These courses are PSY:7350 Introductory Practicum, PSY:7355 Assessment Practicum, PSY:7360 Therapy Practicum, and PSY:7370 Supervision and Consultation Practicum. PSY:7350 consists of attending weekly Clinic Rounds and participating in seminars for developing skills in clinical interviewing and testing conducted by the Director or Assistant Director of the Seashore Clinic and students in the Supervision and Consultation Practicum. Advanced students in the Supervision and Consultation Practicum (PSY:7370) work with first year students throughout the first year to help them develop basic fluency in the administration of standardized psychological instruments. Students typically begin doing psychological assessments in January of their first year.

Advanced students (ordinarily Year 4 or beyond) may register for practicum outside the Seashore Clinic. Such experiences can be valuable in exposing the student to different settings, patient populations, and supervisors, but may also slow student progress in other aspects of the program, so all external practicum arrangements must be approved by the students' advisor, DCT and Clinic Director. This is documented using the *External Clinical Practicum Guidelines and Agreement Form*, available on the internal clinic drive and in the Seashore Clinic Manual of Policies and Procedures (mandatory reading for students).

Practicum hours in the Seashore Clinic may be reduced in Year 4 if the student is engaged in practicum experiences in other settings as a result of the student's research, employment, or registration for practicum credit outside the Department. Permission of the DCT and Clinic Director is required for this reduction.

Registration for practicum in the Seashore Clinic in Year 5 is highly variable. Students who have reached a suitable level of clinical competence (as judged by the clinical-area faculty) need not register if they are engaged in practicum experience outside the Seashore Clinic or should register for at least 1 sh if they are not engaged in any other practicum experience. Such decisions are in consultation with the DCT and Clinic Director.

All students are required to participate in the Supervision and Consultation Practicum (PSY:7370) for one full year. This practicum includes weekly meetings with the Clinic Director, some reading, and intensive teaching and supervision of first-year students in the basics of psychological assessment.

Registration While on Internship. The Grad College requires that post-comp students maintain continuous enrollment, excluding summers, until the degree is awarded. There are two courses that satisfy that requirement for students who have completed all course requirements. Students who have defended before leaving for internship can register for GRAD:6002 Doctoral Continuous Registration to fulfill the registration requirement during the fall and spring semesters (1 s.h. registration/tuition). The students who are still working on the dissertation while on internship could register for either 1 s.h. of PhD Dissertation Research or Doctoral Continuous Registration.

Students need to be registered in the session the PhD degree is to be awarded. Students who have completed the dissertation and finish the internship prior to the end of the summer

session will need to register for GRAD:6003 Doctoral Final Registration for the summer session. If the internship does not end until after the close of the summer session, students can skip summer registration but will need to register for the fall semester when the degree would be awarded.

5. Progress Through Program

- a. *Second-year review:* Early in the spring semester, but after the Graduate Research Symposium, the Clinical Science faculty will hold a meeting devoted to a careful evaluation of the record of each second-year student and decide whether the student should continue in the PhD program. If any Clinical Science graduate student is considered to have not met the requirements of the first-year project paper and talk, maintained an appropriate graduate GPA or underperformed in their research and/or assistantship endeavors, the training area will recommend that the student be placed on departmental academic probation, or terminated from the program if the student was previously placed on academic probation and failed to meet the requirements to return to good standing. To be finalized, this recommendation must be approved by the faculty as a whole and departmental Chairperson.
- b. *Master's degree:* Students who have passed the second-year review are eligible to receive an MA degree, though it is not necessary for the PhD. A student who is terminated from the PhD program at the time of the second-year review (or any other time) may transfer to the MA program and remain in that program through the end of the subsequent term (semester or summer session) if necessary in order to satisfy the requirements for a Master's degree. Master's degree requirements through the Clinical training area include the minimum number of semester hours and their distribution required by the Graduate College and the general requirements described in Part A of this handbook.
- c. *Completion of PhD without internship:* A student in the clinical program who successfully completes all academic course requirements, prepares and satisfactorily defends the doctoral dissertation may petition to receive the Ph.D. degree without first completing the clinical internship. In this case, the official transcript will have no clinical subtrack designation.

6. Clinical Neuropsychology – Major Area of Study

Clinical Neuropsychology is a Major Area of Study within the Clinical Science area, as defined in the American Psychological Association Taxonomy for Education and Training in Clinical Neuropsychology. In accordance with the APA Taxonomy, the Clinical Neuropsychology Major Area of Study is designed to provide students with specialized didactics, research, and clinical training in the foundations and principles of neuropsychology, neuropsychological assessment, and treatment of neuropsychological disorders. This training adds neuropsychologically-focused didactic, practicum, and research training experiences to the base of training that is provided in the Clinical Science area, and extends this emphasis into the internship and postdoctoral periods. Students enrolled in this Major Area of Study follow the usual requirements of the Clinical Science program with the following modifications and additions

A. Required Coursework

1. Principles of Neuropsychology (PSY:6370, 3 sh). NOTE: Course offered every Fall semester; Daniel Tranel, Instructor.
2. Functional Neuroanatomy (ACB:6252, 4 sh). NOTE: Course offered every Spring semester; Justin Sipla, Instructor.
3. Neurobiology of Disease (NSCI:7235, 3 sh). NOTE: Course offered every Fall semester; Natalie Denburg, Instructor.

B. Additional Coursework

Other didactics and related coursework that students can choose from to meet the requirements for Major Area of Study in Clinical Neuropsychology is listed below:

1. Seminar: Neuropsychology & Neuroscience (NSCI:5365, PSY:5365, 0-1 sh). This is the “Morning Meeting” seminar led by Daniel Tranel that takes place year-round on 2 weekday mornings (Tuesday/Thursday) from 7:30 to 8:30 a.m. It is offered continuously including during the summer term. Attendance is required, but students have the prerogative to formally register or not.
2. Neuroscience Seminar (NSCI:6265, PSY:6265, 0-1 sh).
3. Grand Rounds (Neurology, Psychiatry; weekly throughout the year in the Carver College of Medicine)
4. In addition, the following courses are offered variably, and students should determine when they are available and when they would fit into the student’s plan of study:
 - BIOL:5653 Fundamental Neurobiology and BIOL:5658 Fundamental Neurobiology (Discussion)
 - NSCI:5212 Foundations in Behavioral & Cognitive Neuroscience
 - BIOL:3753 Developmental Neurobiology
 - PSY:7210 Advanced Topics in Behavioral & Cognitive Neuroscience
 - PSY:6750 Fundamentals of Clinical Behavioral Neuroscience
 - PSY:3250 Neuroscience of Learning and Memory
 - PSY:3071 Cognition and the Brain
 - NSCI:6250 Functional Magnetic Resonance Imaging

C. Neuropsychology Practicum

1. Background coursework. PSY:5330 Principles of Psychological Assessment (4 sh), and at least two semesters of practicum (PSY:7350) in the Seashore Clinic. These courses are the normal sequence for all clinical students, and are a prerequisite for the practicum experiences below.
2. Neuropsychological Practicum. Students normally begin neuropsychology practicum at the beginning of Year 3 or thereafter. (Depending on the student’s background, earlier neuropsychology practicum experiences may be permitted.) Neuropsychological Assessment: 10 hours/week for two semesters (150 hours/semester), registering for 2-3 sh each semester. Basic neuropsychological practicum may be completed in the Neurology (Anderson, Barrash, Denburg, Jones, Tranel, and Wadsworth) and/or Psychiatry (Caraher, Espe-Pfiefer, Gehl, Hoth, and Moser) Neuropsychology clinics of the University of Iowa Hospitals and Clinics. At least one semester must be in Neurology, though it need not be the first semester. The practicum, which is normally completed in either the third or the fourth year, consists of one full day (7:30 am to 4:30 pm) on any day of the week (or half-day combinations that fit the schedules of the student and the clinic). One semester can be completed in the summer by doing 150 hours over 8 weeks (register for 2-3 sh).
3. Specialty Neuropsychology Practicum. 2 sh 10 hours/week for one semester (150 hours). Any one of the following would serve for this experience:
 - Rehabilitation Practicum (Anderson)

- Geriatric Neuropsychology Practicum (Denburg)
- Pediatric Neuropsychology Practicum (Lindgren and Grafft)

D. Internship

To complete the Major Area of Study in Clinical Neuropsychology, students must complete an internship that comprises at least 50% of training time in clinical neuropsychology and didactic experiences consistent with Houston Conference guidelines for knowledge and skill. Students are subject to other internship requirements for the Clinical Science area more generally.

7. Clinical Health Psychology: Major Area of Study

Clinical Health Psychology is a Major Area of Study within the Clinical Science area, as defined in the American Psychological Association Taxonomy for Education and Training in Clinical Health Psychology. In accord with the APA Taxonomy, the Clinical Health Psychology Major Area of Study is designed to provide students with specialized didactics, research, and clinical training in the foundations and principles of health and behavioral science and behavioral medicine. This training adds didactic, practicum, and research training experiences in clinical health psychology to the base of training that is provided in the Clinical Science area and extends this emphasis into the internship and postdoctoral periods. Students enrolled in this Major Area of Study follow the usual requirements of the Clinical Science program with the following additions.

A. Required Coursework

1. PSY:5710 - Introduction to Health and Behavioral Science
2. One of the following courses:
 - PSY:6210 – Behavioral Psychopharmacology
 - NSCI:7235 – Neurobiology of Disease
 - PSY:7030 – Seminar in Health Psychology
 - Any other course approved by both the clinical and health areas.

B. Clinical Health Psychology Practicum

1. Prerequisites: Students must complete PSY:5330 Principles of Psychological Assessment and two or more semesters of practicum in the Seashore Clinic
2. Students must complete a minimum of 2 semesters of approved clinical health practicum. Multiple training options are available, including at the Iowa City VAMC, Pediatric Psychology Practicum UIHC, Women's Health Center, Organ Transplant Program, and Family Practice

C. Health Psychology Research

1. A minimum of nine semester hours of research devoted to a health psychology topic. With approval from the clinical and health psychology areas this research could be supervised by another faculty member in the department.
2. *Comprehensive Examination:* Students must complete a Comprehensive Examination Paper on a topic relevant to Clinical Health Psychology. The student's Comprehensive Exam Consultation Committee must include at least two clinical-health psychology

faculty members. The CECC must approve the student's topic as relevant to Health Psychology, and the final Comprehensive Exam Committee must include at least three faculty members with expertise in clinical-health psychology.

D. Internship

To complete the Major Area of study in Clinical Health Psychology, students must complete an internship that comprises at least 50% of training time in clinical health psychology. To progress toward specialization in clinical health psychology, the internship must include >50% of clinical service delivery to clinical health psychology patients, family members, and/or interprofessional care teams (e.g., assessment, treatment, consultation). The remainder of supervised experience can include seminar attendance, readings, research, provision of clinical supervision, teaching, program development and evaluation, and administration.

The Comprehensive Examination in Clinical Psychology: Description and Timeline

The Clinical Comprehensive Examination can be completed in two ways. The first option is a Comprehensive Exam Review Paper (CERP) on a topic of significant interest to clinical psychologists and of a sufficiently comprehensive scope that is worthy of publication as a stand-alone article in a journal such as *Psychological Bulletin*, *Clinical Psychology Review*, or a specialty journal that publishes reviews. Additionally, the scope of the paper should be consistent with the letter and spirit of the Graduate College regulations concerning the Comprehensive Examination and reflect the scholarly preparation of a Ph.D. candidate (<https://www.grad.uiowa.edu/manual-part-1-section-xii-doctors-degrees>).

The second option is to complete the Specific Aims (no more than one single-spaced page) and Research Strategy (no more than six single-spaced pages) sections of a National Research Service Award (NRSA) F31 application. In addition, students electing this option must also prepare three additional components for their committee: (1) a critical overview and evaluation of the theoretical and empirical background literature relevant to their project (at least 5 single-spaced pages), (2) a 1-page single-spaced analytic plan that includes power analyses and details proposed analyses and quantitative methods, and (3) a 1-page single-spaced implications section that describes the potential impact of the proposed research and indicates how the project would advance their field both theoretically and empirically. It is recognized that these three components may largely overlap with material in the NRSA application.

Comprehensive Exam Topic Approval Process

Students completing either the CERP or NRSA option will be evaluated using the same procedures and will follow the same timeline. Students may begin the process earlier with permission of their committees. The Comprehensive Exam Consultation Committee (CECC) will be comprised of 4 faculty and membership on the committee must follow all department and Graduate College guidelines. Members of the CECC can overlap with members of students' Research Advisory Committees (RACs) or may be new members.

No later than September 15 of their 3rd year, students must hold an initial consultation meeting with their initial CECC, at which they will discuss their choice of a CERP/NRSA topic. Students will provide members of their initial CECC a brief paper about their topic (approximately 3-5 pages total) no less than 2 weeks before this meeting.

The CERP proposal should include a summary statement / abstract, preliminary outline, and initial set of references for a review paper. The NRSA proposal should include a brief overview of the background/significance of the proposed project, preliminary specific aims, enough about proposed methods and analyses for the area group faculty to determine the scientific quality of the idea and its appropriateness for an NRSA predoctoral fellowship application, and a statement about the independence of the proposed project from the mentor's research program. The CECC will evaluate the proposal for its suitability and likelihood of publication (CERP) or competitiveness for funding (NRSA). At the end of the meeting, the CECC will decide (with the student absent from the room) to approve, provisionally approve, or disapprove the proposal. Provisional approval will be given when the proposal is judged to be suitable, but the CECC feels that some aspect of the proposal needs further refinement. Primary reasons for disapproval of a CERP/NRSA proposal may include, but are not limited to: (a) the CERP/NRSA topic is too similar to that of a recently published review or faculty research project, (b) the number of published articles on the topic for the CERP is too small to draw meaningful conclusions or too large to be reasonably completed within the confines of the exam, (c) the topic of the CERP is unlikely to be of significant interest to clinical psychologists), (d) the research aims for the NRSA describe work that would be difficult to

complete during the proposed fellowship period, or (e) the scientific quality of the proposed NRSA project is insufficiently high.

If a CERP/NRSA topic is disapproved, the faculty must provide the student with written rationale for this decision within 2 weeks of the meeting. The CECC will decide how to write this statement, but typically the student's major advisor will write the statement with input from other CECC members. All CECC members must give final approval to the written rationale. If the topic is either approved provisionally or disapproved, the student and CECC will agree on a mutually acceptable date for resubmission of the proposal, which will be reviewed by the CECC. All other deadlines will remain unchanged. Advisors will inform the DCT when the proposal has been approved.

Submission and Reviews of First Draft of CERP/NRSA

Students will submit their completed CERP/NRSA to their CECC by the second Monday in January of their third year or sooner. Students completing a CERP must also include the names of three to five rank-ordered journals to which the student is considering submitting the paper, at least one of which must be a general interest journal (i.e., *Psychological Bulletin*, *Psychological Review*, *Clinical Psychology Review*, or *American Journal of Psychiatry*), and the others of which may be relevant specialty journals or a journal in a student's subtrack area that publishes reviews. Students completing an NRSA must also include the name of the NIH institute/center and scientific review group they anticipate asking to review their proposal (note these are not standing study sections but special SRGs that review F31 proposals). Students may consult freely with faculty regarding the choice of journals, NIH institutes, and study sections.

The CERP/NRSA must be written entirely by the student and the presumption is that the comprehensive examination will be the student's independent work. This does not preclude students discussing their CERP/NRSA with their advisors, other faculty including CECC and RAC members, and other students. However, no faculty member, including the student's faculty advisor, may read any student's CERP/NRSA prior to its submission to the CECC, or provide direct feedback on the written product. All feedback on the written product by faculty will occur within the context of the formal CERP/NRSA evaluations.

Within three weeks of the receipt of the CERP/NRSA, each CECC member will provide the student and other CECC members with a comprehensive review of the CERP/NRSA. For the CERP, this review would be similar to the constructive, detailed reviews that typically would be written for an article submitted to a top-tier peer-reviewed journal. For the NRSA, the faculty will write a review that covers the review criteria for the research plan portion of the NRSA and also comment critically on the adequacy of the student's additional written materials (background, statistical plans, and implications). For example, faculty may evaluate whether the proposed research project is of high scientific quality, whether the research project is consistent with the student's stage of research development, if the proposed time frame is feasible to accomplish the research project, and if the student presents a clear and critical understanding of the background literature, the statistical techniques they will use, and the potential theoretical and empirical implications of the research project. In addition to this written review, to facilitate communication, CECC members may return the CERP/NRSA document to the student with inserted comments. Note, however, that such comments do not take the place of the comprehensive written review, and faculty should not re-write text for the student in the CERP/NRSA. In keeping with the presumption that the CERP/NRSA is the student's independent work, no other written feedback is permitted. However, to increase the likelihood that the final submission will be Satisfactory, oral feedback may be provided to the student by any or all committee members regarding the extent of revisions expected. *Note:* No decision on the Comprehensive Examination is made based on this submission. All students must revise and resubmit a final draft of their CERP/NRSA.

Submission of Revised Draft of CERP/NRSA

Students will revise their CERP/NRSA in response to the reviews and submit a revised CERP/NRSA and cover letter by the Monday of the second week before finals week in the student's third year (spring semester) or sooner. The cover letter should detail where and how the student revised the CERP/NRSA. Students who complete an NRSA have the option of submitting a 1-page (single-spaced) response-to-reviewers type document that is allowed for a resubmitted NRSA proposal. The revision and cover letter will be submitted to the Comprehensive Exam Committee (CEC).

Evaluation of Revised Draft of CERP/NRSA and Oral Defense

The CEC will meet with the student no later than the last day of classes, spring semester. Note that this meeting can be scheduled well in advance, because it will always occur no later than the last two weeks of classes (it can occur earlier). The meeting will consist of two components, both of which should be scheduled for one hour each. The first component will be a 1-hour Oral Defense. In the Orals, students may be asked about any aspect of their CERP/NRSA, with an eye toward making sure they answer questions on assessment, psychopathology, treatment, basic science background of the work, and ethics. The questions will generally be broad and will require the student to place the topic and findings in a wider context, discuss the topic from alternative theoretical perspectives, address methodological issues, and comment on the implications of the findings for the broader field. Each member of the CEC is expected to generate at least one question to be asked during the Oral Defense.

Following the Oral Defense, the student will be dismissed from the meeting. The CEC will then discuss their evaluations of the completed CERP/NRSA and the Oral Defense. Below are guidelines for faculty to use when evaluating the completed written product and the Oral Defense. For students completing a CERP, CEC members will consider the top three journals to which the student plans to submit the paper, and then evaluate the CERP as (a) "Satisfactory" if they would recommend either "Accept Pending Revision" or a "positive" "Revise and Resubmit," meaning that they expect that the paper ultimately could be accepted for publication *without* substantial work being done by someone other than the student, (b) Reservations, if they would recommend a "negative" "Revise and Resubmit," meaning that they are not convinced that the paper ultimately could be accepted for publication without substantial work being done by someone other than the student (e.g., to the point that authorship order might need to be reconsidered), or (c) Unsatisfactory, if they would recommend "Reject."

For students completing the NRSA option, faculty may evaluate the work considering the current F31 review criteria for a research plan, as well as a critical consideration of the supplemental materials. For example, faculty may evaluate whether the proposed research project is of high scientific quality; whether the research project is consistent with the student's stage of research development; if the proposed time frame is feasible to accomplish the research project; and if the student presents a clear and critical understanding of the background literature, the statistical techniques they will use, and the potential theoretical and empirical implications of the research project. If faculty determine that the student has submitted materials that meet these criteria, they will evaluate them as "Satisfactory." If there are concerns about one or more of these criteria, faculty can evaluate the NRSA as "Unsatisfactory" or can indicate that they have "Reservations" about its potential competitiveness.

Faculty will then make an overall determination of "Satisfactory," "Reservations," or "Unsatisfactory" based on discussion of both the CERP/NRSA and the adequacy of the student's responses in the Oral Defense.

The student's advisor will inform the DCT of when the evaluation meeting will take place and, as soon as possible after the meeting. Forms will be circulated via DocuSign for faculty to

register their evaluation of the CERP/NRSA. The student's major advisor and the DCT will meet with the student if the first evaluation is not satisfactory.

Process if First CE is not "Satisfactory"

If the resulting CE grade is "Reservations," the CEC will provide the student within one week with a review of the CERP/NRSA and Oral Defense that lists the examiners' concerns, and the student will have the opportunity to revise the CERP/NRSA and/or to complete a second Oral Defense in response to these reviews. The form of the review will be determined by the CEC members, but the review must be sufficiently detailed to provide the student with adequate guidance for revision of written materials, similar to that received when a manuscript receives a Revise-and-Resubmit editorial decision or NRSA peer review, or for preparation for a second Oral Defense. Again, students may discuss their CERPs/NRSAs and oral defense with their advisors, other faculty including CEC members, and students, but no faculty member may comment on students' written CERPs/NRSAs outside of the formal review and grading process described above. Students will submit their revised CERP/NRSA (if required) by September 1 of their fourth year and complete a second Oral Defense (if required) by September 15. By September 15, the CEC members will meet to discuss and record their evaluations of the revised CERP/NRSA and/or the Oral Defense. At this time, each CEC member's evaluation will be either Satisfactory or Unsatisfactory. A Satisfactory evaluation indicates (a) that the student's revision of the CERP/NRSA (if required) responded adequately to the examiners' concerns such that the evaluator now expects that the CERP ultimately could be published or the research plan portion of the NRSA ultimately could be competitive for funding without *substantial work being done by someone other than the student*); and (b) that the student's responses during the second Oral Defense were adequate.

If the first Exam grade is Unsatisfactory, the clinical-area faculty shall make a determination no later than the next regularly scheduled CATC meeting whether the student shall be retained in the program and allowed to retake the CE or shall be required to leave the program. If the area faculty decides that the student shall be allowed to retake the CE, the student must repeat the CE process from the beginning. Whether or not this will be with the same or a new topic will be decided by the CEC in consultation with the student. Students who do not receive a Satisfactory grade on the CE by the beginning of their fifth year will be required to leave the program at the end of that fall semester.

Follow-up

All students who pass their CE and Oral Defense are strongly encouraged to make final revisions based on CEC members' feedback and to submit their CERP or NRSA for peer review. After passing their CE, students may work on their CERP with co-authors of *their* choosing but are expected to retain first authorship on the submitted manuscript. Additionally, students are encouraged to meet individually with members of the CEC to obtain more feedback and suggestions.

Timeline for Clinical Science Comprehensive Examination – 3rd Year of Study

ACTIVITY	DEADLINE	INTERVAL
Topic Submission: Submit topic proposal for comps to Comprehensive Exam Committee (CEC)	September 1	NA
CEC Meeting & Approval: CEC and student have initial meeting: If approved – no further action needed If provisionally approved – CEC holds second meeting for final approval If disapproved – CEC provides rationale at meeting. Student prepares new submission and begins initial meeting process until approval granted by CEC Final topic approval	September 15 NA By mutual decision NA September 30	2 weeks NA Faculty feedback day of meeting; resubmission within 2 weeks NA 1 month following initial submission
CERP/NRSA 1st Submission: First submission due to CEC	Second Monday in January	~4 months
CEC Feedback on 1st Submission: Faculty provides written feedback on first submission	January 31	3 weeks post submission
CERP/NRSA Final Submission: Final submission to CEC Notify Becky Huber of date of oral defense so she can prepare paperwork for Graduate College	Monday before last week of classes of spring semester	~9 weeks
Final oral defense and evaluation of CERP/NRSA with CEC Following defense, faculty meet to decide outcome (satisfactory, reservations, unsatisfactory) <i>If reservations</i> – faculty provide written review Student submits revision <i>If unsatisfactory</i> – CATC decides on retention If retained – start process over If not retained – terminated	Friday of Spring semester final's week May 28 September 1 (4 th year) Resume timeline End of Fall semester	At least 2 weeks post final submission No more than 2 weeks post-defense ~ 4 months

Appendix A – Course Requirements for Ph.D. in Clinical Science

Core Courses (all required)

PSY 7310 – Orientation to Clinical Research
 PSY 5320 – Descriptive Psychopathology
 PSY 5330 – Principles of Psychological Assessment
 PSY 6340 – Psychological Therapies

Statistics/Research Methods (2 required, 3 strongly recommended)

5050, PSQF 6243, BIOS 5110 or equivalent stats/research methods
 PSY 5055, PSQF 6244, BIOS 5120 or equivalent stats/research methods
 Multiple other quantitative/stats courses available in PSQF and across university. If wanting to pursue a specific stats course not listed as requirement, please contact DCT.

Research Credits

PSY 7110 Research Projects (6 semesters minimum)
 PSY 7130 Dissertation Research (enroll after prospectus approved)

APA Discipline Specific Knowledge

(1 each in bio, cog, dev, and social, history and systems, and integrated)

Biological Bases of Behavior (PSY 5212, PSY 6210, PSY 6370, ACB 6252)
 Cognitive Bases of Behavior (PSY 5610, PSY 6230, PSQF 6281)
 Developmental Bases of Behavior (PSY 5410, PSQF 6213)
 Social/Cultural Bases of Behavior (PSY 7150, PSQF 7367)
 History and Systems of Psychology (PSQF 7320, PSY starting Spring 2024, UG can be substituted)
 Integrated Courses or Training Experience (PSY 5710, PSY 6360, PSY 6440, PSY 6590, NEUR 7235)
 *Individual Differences, Psychometrics, Psychopathology, Affective Bases of Behavior, and Professional Ethics met by core requirements

Practicum Credits

PSY 7350 – Introductory Practicum (1st year Fall semester)
 PSY 7355 – Assessment Practicum (1st year Spring Semester, 2nd Year Fall Semester)
 PSY 7360 – Therapy Practicum (2nd year Spring Semester and beyond)
 PSY 7365 – External Practicum (3rd year and beyond when relevant)
 PSY 7370 – Supervision and Consultation Practicum (4th or 5th year)
 PSY 7330 and 7331 – Seminar in Acceptance and Commitment Therapy (elective)
Note: Students must be enrolled in at least one credit of practicum to be covered by university malpractice insurance.

Internship Enrollment

GRAD 6002 – Doctoral Continual Registration (1 s.h. in Fall and Spring of internship year)
 GRAD 6003 – Doctoral Final Registration (Summer session before August PhD Conferral date)

Credit Hours

Total: minimum of 72 sh, maximum of 16 sh of PSY 7130, including transfer credits
Psych: minimum of 24 hs, including transfer credits, seminars, individual instruction (not practica)
Total within department: (a) 22 sh including statistics, not transfer credits and (b) minimum of 15 sh excluding transfer credits, statistics, practica, and individual instruction

Note – list of courses is not exhaustive. Students may petition for transfer courses or courses not on this list to count for requirements by submitting request in writing to DCT. Neuropsychology and Clinical Health Psychology Majors have additional course and practica requirement. s

Course	Title	Instructor	Schedule/Last Taught
PSY 7310	Orientation to Clinical Research	DCT (Nikolas)	Fall and Spring semesters of 1 st year
PSY 5320	Descriptive Psychopathology	Nikolas	Fall of odd years
PSY 5330	Principles of Psychological Assessment	Petersen	Spring of even years
PSY 6340	Psychological Therapies	Lutgendorf	Fall of even years
PSY 5050	Quantitative Methods in Psychology	Mordkoff	Fall of every year
PSY 5055	Mixed Effects Modeling in Psychology	Treat	Spring of odd years (taught Fall 2023 instead of spring)
PSY 5212	Foundations in Behavioral and Cognitive Neuroscience	Team	TBD
PSY 6210	Behavioral Pharmacology	Johnson	TBD
PSY 6370	Principles of Neuropsychology	Tranel	Fall of every year
ACB 6252	Functional Neuroanatomy	Sipla	Spring of every year
PSY 5610	Proseminar in Cognition and Perception	Hollingworth/McMurray	Fall of even years (last taught Fall 2022)
PSY 6230	Foundations of Learning, Memory, and Cognition	Wasserman	Spring of even years (last taught Spring 2023)
PSQF 6281	Cognitive Theories of Learning	Lira	Spring of every year (last taught Spring 2023)
PSY 5410	Proseminar in Developmental Science	Cook	Spring every 2-3 years (last taught Spring 2021)
PSQF 6213	Advanced Lifespan Development	Brown	Spring every 1-2 years (last taught Spring 2023)
PSY 6360	Psychosis: Neurobiological, Cultural, and Evolutionary Perspectives	Baran, McCleery	Spring every 1-2 years (last taught Spring 2023)
PSY 7150	Social Bases of Behavior	DCT	Directed readings. Can do at anytime
PSQF 7367	Social Psychology and Social Systems	Zhang	Spring every 1-2 years (last taught Spring 2023)
PSQF 7320	History of Systems of Psychology	Zhang	Fall every 1-2 years (last taught Fall 2022). Department course Spring 2024.
PSY 5710	Introduction to Health and Behavioral Science (BBIP course)	Voss	Spring of even years (last taught Spring 2022)
PSY 6440	Developmental Cognitive Neuroscience	Demir-Lira	Fall every 1-2 years (last taught Fall 2022)

Appendix B: CS Program Requirement Checklist and Transcript Information

Student Name:

Mentor:

Course Requirements

Requirement	Course	Semester
Stats 1		
Stats 2		
Psychopathology		
Assessment		
Therapies		
Biological Bases DSK		
Cognitive Bases DSK		
Developmental Bases DSK		
Social Bases DSK		
History & Systems		
Ethics		
BUILD Workshop		
Integrated Course		

Research Requirements

Requirement	Completion Date
First-Year Project	
Graduate Research Symposium	
Comprehensive Exam Proposal	
Comprehensive Exam Defense	
Dissertation Proposal	
Dissertation Final Defense	

Other Requirements

Requirement	Completion Date
Data Blitz #1	
Data Blitz #2	
Research Presentation #1	
Research Presentation #2	

Clinical Requirements

Requirement	Year
1 st Year CS Seminar	
1 st Year Clinical Seminar	
2 nd Year Clinical Seminar	
3 rd Year Clinical Seminar	
Supervision Consultation Practicum	
Internship	

CS Transcript Information**Student Name:**

Required Course	Semester(s)	Credits
PSY 5320: Descriptive Psychopathology		
PSY 5330: Principles of Psychological Assessment		
PSY 6340: Psychological Therapies		
PSY 5050: Quantitative Methods in Psych (or equiv)		
PSY 5055: Mixed Effects Modeling in Psych (or equiv)		
PSQF 7320 or PSY History and Systems of Psychology		
Biological DSK:		
Cognitive DSK:		
Developmental DSK:		
Social DSK:		
Integrative Course:		
PSY 7110 – Research Projects		
PSY 7130 – PhD Dissertation Research		
PSY 7310 – Orientation to Clinical Research		
PSY 7350: Introductory Practicum		
PSY 7355: Assessment Practicum		
PSY 7360: Therapy Practicum		
PSY 7365: External Practicum		
PSY 7370: Supervision and Consultation Practicum		
PSY 7330: Acceptance and Commitment Therapy Seminar		
PSY 7331: Advanced ACT Seminar		
Electives:		
Electives:		
Electives:		
Electives:		
Electives:		
Electives:		

Credit Hours**Total:** minimum of 72 sh, maximum of 16 sh of PSY 7130, including transfer credits**Psych:** minimum of 24 hs, including transfer credits, seminars, individual instruction (not practica)**Total within department:** (a) 22 sh including statistics, not transfer credits and (b) minimum of 15 sh excluding transfer credits, statistics, practica, and individual instruction

APPENDIX C CONSIDERATIONS FOR SUBMISSION OF NRSA (F31)

Individuals who complete the NRSA option for the comprehensive exam are encouraged to consider completing the comprehensive exam on an accelerated timeline to be able to submit the full NRSA application to NIH in a timely manner. The NIH's guidance for NRSA submission dates and potential start dates is listed below and should be used when determining when a student will complete the NRSA comprehensive exam option. Students should also consider the probability that they will not be funded on the first submission and will need to address reviewer comments and submit a revised proposal to be successful in receiving funding. An example timeline that includes submitting a revised proposal is provided below.

NIH guidelines for F31 submission and start dates

Receipt Date	Review Date	Potential Start Date
April 8	June/July	December
August 8	Oct./Nov.	March
December 8	Feb./March	July

Example Timeline

April	Initial NRSA proposal submitted
July	Score sheet returned
December	Revised NRSA proposal submitted
April	Score sheet returned
June	Notice of Award received
September	Award activated

Given that faculty, and specifically the research mentor/NRSA sponsor, are unable to read the NRSA proposal during the comprehensive exam process, students utilizing this option for the comprehensive exam should plan to have at least 2 months between the completion of their comprehensive exam defense and submitting the proposal to NIH. This ensures that the mentor/sponsor and student/fellow have ample time to work together on the proposal. In addition, this provides the student time to prepare the numerous remaining documents required of an NRSA proposal (see list below; page maximums and additional details in parentheses). Students should also be aware that there are several documents that are required to be completed by other individuals (mentor/sponsor, co-sponsor, collaborators, consultants, reference writers) and are encouraged to communicate with these individuals as early as possible to ensure they have adequate time to complete their documents.

COGNITION TRAINING AREA

1. General focus

The Cognition area is concerned with the fundamental psychological processes underlying all aspects of mind and behavior across the lifespan: perception, action, memory, language, comprehension, judgment and decision making, learning, and so on. The area has significant strengths in cognitive development and visual cognition.

2. Faculty

The primary faculty in the Cognition training area are Eliot Hazeltine (area coordinator), Bruce Bartholow, Susan Wagner-Cook, Ece Demir-Lira, Prahlad Gupta, Andrew Hollingworth, Kai Hwang, Jiefeng Jiang, Bob McMurray, Cathleen Moore, Toby Mordkoff, Jodie Plumert, James Traer, Teresa Treat, Shaun Vecera, Jan Wessel, and Paul Windschitl. The secondary faculty are Isaac Peterson, Daniel Tranel, and Edward Wasserman. In addition, the following faculty with interests in cognitive and perceptual psychology have joint or adjunct appointments in the department: Gary Gaeth (Marketing).

3. Research Requirements

- a. *Research Advisory Committee and meetings:* In consultation with his or her advisor, new students must establish a Research Advisory Committee (RAC) that is comprised of the advisor and two other faculty members no later than one month after the beginning of the student's first term.

Up until the successful passing of the second-year review, Cognition students must meet with their RACs every semester during the last week of classes or exam week to review activity during that semester and to establish specific plans for the following term. Students are encouraged to get this meeting time established early in the semester to accommodate schedules at the end of the term.

Cognition students must schedule a separate meeting with their RACs sometime within two weeks after turning in the first-year project report. Details of this meeting are described below. Students are encouraged to get this meeting established early to accommodate schedules.

The RAC will be dissolved following the successful passing of the second-year review, at which point a comprehensive exam committee will be established as described below.

- b. *First-year project and report:* Cognition students must complete a first-year research project which includes an empirical component. A report describing that project is due to the student's RAC and the area coordinator no later than the second Monday after Thanksgiving of the fall semester of the student's second year. This report should be a manuscript-style report in the format that would be appropriate for submission to a journal such as *Journal of Experimental Psychology: Human Perception and Performance* or *Cognition*.
- c. *First-year project RAC meeting:* Within two weeks after the first-year project is turned in, Cognition students must meet with their RACs about the first-year project and write up. If there are major concerns with the document, the RAC will request a revision and possibly a second meeting. The student will need to meet separately with the RAC in the fall semester of the 2nd year to review their overall progress in the program, plans for the upcoming semester, and preparation for the Graduate Research Symposium, which is held early in the Spring semester of the student's 2nd year.
- d. *Graduate Research Symposium:* Cognition students must present their first-year project at the Graduate Research Symposium, which is held early in the spring semester of their second year.

- e. *Comprehensive examination:* After passing the second-year review, Cognition students will form a comprehensive exam committee following departmental rules regarding committee composition. There can be overlap in membership from the student's RAC committee.

The first phase of the comprehensive examination is a meeting with this committee that consists of two parts. The first part will be a discussion between the student and the committee regarding the student's general research interests, professional goals, and the coursework that he or she has completed. This is expected to be an open-ended dialog about the student's goals and aspirations. It is an opportunity for the student to receive advice from multiple faculty and for the committee to assess what the student should know in order to achieve his or her professional goals. Students will have begun this discussion with their advisors and RACs long before this meeting.

The second part of the meeting will take place without the student. Based on the preceding discussion, the committee will draft a set of five questions that will be used for the written part of the student's comprehensive exam. These questions will be refined and finalized prior to the beginning of the exam.

Approximately one week after the meeting, the student will receive the set of 5 questions and will be required to provide written answers to four of them. Some of the questions may be designated as non-optional (i.e., cannot be the question dropped), but there will be some choice involved. The student turns in the written answers two weeks after receiving the questions. The specific start date of the exam will be determined together by the student and committee.

An oral defense must be completed by the end of the first week of classes of the student's third year.

- f. *Prospectus:* Following successful completion of the comprehensive exam, students will form a dissertation committee following the committee composition rules of the department.

Students will submit a dissertation proposal to their committee that describes the work that will be included in the dissertation (i.e., the sequence of experiments along with the theoretical significance) and the format of the dissertation (i.e., whether it will be a traditional long paper, a "stapled" collection of published/submitted manuscripts, or some hybrid option). Students may submit the proposal as an NRSA grant proposal (or a grant to some other funding agency, provided the proposal includes an adequate description of the work and significance) to the dissertation committee so that they can receive feedback before submitting it. If this option is chosen, the student should submit a separate document (about a paragraph or two in length) describing the planned format of the dissertation.

Within two weeks after submitting the prospectus, students should meet with their dissertation committees for approval of their plans. The committee must unanimously approve the plan. If the plan changes, the student should get approval for the new plan with each member of the committee. If the changes are major, as determined by the student or any member of the committee, a new proposal should be written and another meeting should be arranged. This prospectus process is designed in recognition of the fact that plans for dissertation research will evolve over time as the research unfolds.

- g. *Dissertation:* The dissertation must have a significant empirical component, an explanation of the logic supporting the methods and interpretation of the data, a description of the theoretical contribution of the empirical work, a review of the relevant literature, and a discussion of how the work contributes to the field and serves as a foundation for a broader research program.

Students will work with their committees to develop a course of action that satisfies these requirements and suits an expeditious plan for disseminating the findings. The goal is to select a format that minimizes unnecessary work and allows students to be maximally productive while ensuring that they have demonstrated the level of expertise we require for issuing a PhD. Both the format and the content (e.g., theoretical and empirical components) must be specified in the student's signed dissertation plan.

Some possible formats for the dissertation include:

- i) The standard dissertation format, especially if none of the work is ready for publication.
 - ii) A set of submittable (or submitted/accepted) manuscripts with bookends (or a single document) describing the broader implications of the work and how the papers cohere, and how they fit with a larger research agenda.
 - iii) If the manuscripts are short or very empirical, something like the option (ii) above with an additional literature review.
- h. *Dissertation defense*: The final stage of the dissertation process will be an oral defense. Students must submit the dissertation document to the PhD committee no later than one week prior to the defense date. The defense will consist of two parts, a public part which is colloquium style and offers a description of the research, and a closed part which includes just the student and the PhD committee.

4. Course Requirements

Course work is intended to provide students with a foundation of background and skills that they need to be effective in their professional lives. For graduate work, passing a course entails receiving a grade of B- or better. See Part A of this handbook for information regarding requirements for training in the responsible conduct of research, and overall credit and course-load requirements. The following information concerns requirements that are specific to students in the CP training area.

- a. *Proseminar*: All students in the Cognition training area must complete two semesters of the Cognition and Perception Proseminar to gain basic working knowledge of the various subfields within Cognitive Psychology. It is expected that students be conversant in the major theoretical debates and methodological approaches encountered in cognitive psychology, and to be able to draw on these when they become relevant to the student's own line of research. Under typical circumstances, students should complete the two semesters of the Proseminar by the end of their 2nd year.
- b. *Statistics*: Professional scholars need a solid understanding of basic statistical theory and effective practice (including but not limited to a working knowledge of statistical procedures). Each student is expected to demonstrate or develop competence in research design and statistical analysis as soon as possible. All students in the Cognition track must take at least two semesters of graduate-level statistics (i.e., courses at the 200-level or higher). Each entering student should consult with his or her advisor and Research Advisory Committee to determine the course of study that should be followed to satisfy this requirement given the student's background and desired expertise.
- c. *Additional courses (plan of study)*: Each student's Research Advisory Committee (RAC) will work with the student individually to develop a plan of study that specifies the course work that needs to be completed by the student. The plan of study will include at least four courses in addition to the Proseminar, statistics, and responsible conduct of research requirements. The goal is to develop a plan that meets the particular needs of the student and provides the necessary background and expertise for the student to become successful in her or his

particular topic of research. Thus, the exact number of classes will vary across students, depending on the knowledge they need to be productive in their subfield.

The student must submit the proposed plan of study, initialed by each member of the RAC and the student, to the area coordinator, who will review it and decide to either (a) approve it or (b) submit it to the primary members of the area for area-wide approval. If the plan is not approved, the area coordinator will work with the RAC and the student to modify the proposed plan of study. The student's plan of study will become part of the student's file and thereby be available for review by the student and area faculty.

The plan of study should be approved sometime during the spring semester of the student's 1st year in the program, thus allowing time for fall-semester registration. The plan can be changed at any time with the approval of the student, the RAC, and the area coordinator. Signed change of plans will, like the original plan, be submitted to the area coordinator, who will review it and decide to either (a) approve it or (b) submit it to the primary members of the area for area-wide approval.

Finally, additional classes beyond the plan can of course be taken at the student's discretion, and a student's advisor may well suggest such courses.

- d. *Colloquia*: In addition to formal courses, students are expected to seek broad exposure to research in psychology through regular attendance at departmental colloquia, including those in areas of study outside the boundaries of their own training area. We expect Cognition students to attend, at a minimum, all BCN/C/DS brown bags and Departmental (Friday afternoon) colloquia. In addition, many Delta Center events will be of interest and appropriate for Cognition students to attend.
- e. *Petition process to apply previous graduate work to course requirements*: Students who have taken graduate-level coursework at other institutions may seek permission to use this coursework to substitute for some required courses. The student should consult with his/her advisor regarding what aspects of the requirements will be met through the transfer credits and prepare a brief (e.g., ½ page) description of the course/s and how they will be applied to the requirements of this program. The student should submit this petition, along with the syllabus of the course/s, to the CP area coordinator. The petition will be distributed to the Cognition faculty and voted on either via email, or if necessary, following a meeting. In the event that a petition is denied by the Cognition faculty, the student can appeal to CGS, and following that to the departmental Chairperson. See Part A of this handbook for details of that process.

5. Other

- a. *Second-year review*: The second-year review process for the Cognition area consists of a meeting of the area faculty, soon after the Graduate Research Symposium, in which they discuss the progress of each of the second-year students in the program. The evaluation will be based on all aspects the student's performance including course-work, research, the first-year project and report, performance at the Graduate Research Symposium, performance in assistantships and engagement in program events such as brown bags and colloquia, and professional behavior. Input will be solicited from RAC members and instructors of courses that the student took. The goal of the second-year evaluation is to assess whether the student seems likely to be in a position to successfully complete the PhD program.

The training area will make a recommendation that (1) the student continue on to the next stage of the program, (2) the student be placed on departmental probation and re-evaluated after a specified period of time during which he/she works to remediate whatever deficiencies were identified, or (3) the student be recommended for termination from the

program (provided that the student has not satisfactorily improved performance shortcomings that were previously communicated by the department in writing). The student will receive a written report reporting the recommendation.

If the recommendation from the training area is either for departmental probation or termination from the program, the report will be submitted to CGS and the department for approval and/or revision.

Students will receive a written report of the outcome of the second-year review.

- b. Master's degree:* Students who have passed the second-year review and are continuing on to completion of the PhD are eligible to receive an MA degree, though it is not necessary for the PhD. A student who is terminated from the PhD program at the time of the second-year review (or any other time) may transfer to the MA program and remain in that program through the end of the subsequent term (semester or summer session) if necessary in order to satisfy the requirements for a Master's degree. Master's degree requirements through the Cognition training area include the minimum number of semester hours and their distribution required by the Graduate College and the general requirements described in Part A of this handbook.

INDIVIDUALIZED GRADUATE TRAINING TRACK

1. General focus

The purpose of the individualized graduate training track option is to provide flexibility to graduate students who want to pursue a specialized course of study that does not fit easily within the other three graduate training areas. Students can choose the individualized training track when applying to the PhD program, or may petition CGS to switch to the individualized track after starting the PhD program. The decision about whether to approve a student's petition to switch to the individualized track will be made in consultation with the student's advisor and his or her current training area.

2. Oversight

Oversight of students in the individualized training track will be provided by the student's Research Advisory Committee (RAC; see below), the Director of Graduate Studies (DGS), and the Committee on Graduate Studies (CGS). The DGS will serve in lieu of an area coordinator and the members of CGS will serve as the oversight body in lieu of a training area.

3. Research Requirements

- a. *Research Advisory Committee and meetings:* Before the end of the first semester here, each student, in consultation with his or her advisor, must select an RAC consisting of the advisor and two other members of the department faculty. The membership of an RAC may be modified at any time. The committee must meet as a group with the student at least once a semester until the student has formed a comprehensive exam committee.

To verify that the student met with the committee, the student must provide documentation of the meeting to the departmental secretary no later than the last day of finals week (a form is available for this purpose on the departmental internal website, but any reasonable documentation will suffice). This documentation must be initialed by the student and the committee members, verifying that an actual face-to-face meeting took place. If documentation is not provided, the student will receive a grade of Incomplete for his or her research registration; the Incomplete will be replaced by a letter grade as soon as a meeting occurs and documentation is provided. The role of this committee is to be a source of advice and feedback to the student and of informed input to any faculty group that evaluates the student.

- b. *First-year project report:* By the second Monday at 5pm following Thanksgiving break of their second year, students – including those who have entered with Master's degrees – must turn in a research progress report (in APA style) describing a research project that they have performed during their time in our graduate program. This report should include the scientific rationale of the project and the methods used as well as any results obtained to date, and what they mean. If data collection is not complete, the document must clearly indicate how much is left to do, and must specify a timetable for completion of the project. An electronic copy of this report should be sent to the RAC, and the DGS.

A student's initial research project may be a part of his or her advisor's ongoing research program, selected to enable the student to demonstrate progress toward competency for independent scholarship and research with a minimum of impediments. The scope of the

project should be such that a substantial portion of it can be completed in a year and a half. All projects must involve working with data and the data must be subjected to appropriate analysis.

- c. *Graduate Research Symposium*: At the beginning of the spring semester, each second-year student will present a conference-style talk (usually fifteen minutes plus time for questions) describing his or her research to the assembled department in the annual Graduate Research Symposium.
- d. *Comprehensive examination*: After passing the second-year review, individualized-track students will form a comprehensive exam committee. There can be overlap in membership from the student's RAC committee. The comprehensive exam committee will select from among the available comprehensive exam models in the department, or may create a new comprehensive exam format contingent upon approval from CGS.
- e. *Prospectus and dissertation*: Following the comprehensive exam, students will form a dissertation committee. This committee will often overlap partially or fully with the comprehensive exam committee.¹ The dissertation committee will select from among the available dissertation models in the department, or may create a new dissertation format contingent upon approval from CGS. Regardless of which model is chosen, the following principles apply to the dissertation. The work should principally represent the intellectual contribution of the student. The work should be judged as a whole to make a significant contribution to the relevant literature. The work should have coherence as a piece or program of research. The research advisor and dissertation committee members are the best judge of the merits of work that is meant to represent a dissertation.
- f. *Dissertation defense*: A formal request for the PhD final exam must be submitted through the DGS and the department Chairperson to the Graduate College at least three weeks in advance of the exam. The student is responsible for getting a copy of the dissertation to the Committee members at least two weeks in advance of the exam. The exam is an oral defense of the dissertation that includes critical questions about the purpose, method, and results presented in the dissertation and intense questioning on areas of knowledge consistent with the content of the dissertation. The exam is unsatisfactory if two Committee members rate it to be so. In this case, the exam may be repeated once on the recommendation of the Committee and approval of the full faculty.

4. Course Requirements

Course work is intended to provide students with a foundation of background and skills that they need to be effective in their professional lives. For graduate work, passing a course entails receiving a grade of B- or better. See Part A of this handbook for information regarding requirements for training in the responsible conduct of research, and overall credit and course-load requirements.

- f. *Statistics*: Professional scholars need a solid understanding of basic statistical theory and effective practice (including but not limited to a working knowledge of statistical procedures). Each student is expected to demonstrate or develop competence in research

¹ Note that if the BCN comprehensive exam model is chosen, the comprehensive exam and prospectus will be combined.

design and statistical analysis as soon as possible. All students in the individualized track must take at least two semesters of graduate-level courses in research methodology and/or statistics (i.e., courses at the 5000-level or higher). Each entering student should consult with his or her advisor and RAC to determine the course of study that should be followed to satisfy this requirement given the student's background and desired expertise.

- g. *Additional courses (plan of study)*: Each student's RAC will work with the student individually to develop a plan of study that specifies the course work that needs to be completed by the student. The plan of study will include at least four courses in addition to the research methodology/statistics and responsible conduct of research requirements. The goal is to develop a plan that meets the particular needs of the student and provides the necessary background and expertise for the student to become successful in her or his particular topic of research. Thus, the exact number of classes will vary across students, depending on the knowledge they need to be productive in their subfield.

The student must submit the proposed plan of study, initialed by each member of the RAC and the student, to the DGS, who will review it and decide to either (a) approve it or (b) submit it to CGS for committee-wide approval. If the plan is not approved, the DGS will work with the RAC and the student to modify the proposed plan of study. The student's plan of study will become part of the student's file and thereby be available for review by the student and CGS. The plan of study should be approved sometime during the spring semester of the student's 1st year in the program, thus allowing time for fall-semester registration.

The plan can be changed at any time with the approval of the student, the RAC, and the DGS. Signed change of plans will, like the original plan, be submitted to the DGS, who will review it and decide to either (a) approve it or (b) submit it to CGS for committee-wide consideration.

Finally, additional classes beyond the plan can of course be taken at the student's discretion, and a student's advisor may well suggest such courses.

- h. *Colloquia*: In addition to formal courses, students are expected to seek broad exposure to research in psychology and related fields through regular attendance at departmental and university colloquia, including those in areas of study outside the boundaries of their own research. For example, students may choose to attend events and talks associated with the DeLTA Center, Iowa Neuroscience Institute, and the BBIP.
- i. *Petition process to apply previous graduate work to course requirements*: Students who have taken graduate-level coursework at other institutions may seek permission to use this coursework to substitute for some required courses. The student should consult with his/her advisor regarding what aspects of the requirements will be met through the transfer credits and prepare a brief (e.g., ½ page) description of the course(s) and how they will be applied to the requirements of this program. The student should submit this petition, along with the syllabus of the course/s, to the DGS. The petition will be distributed to CGS and voted on either via email, or if necessary, following a meeting. In the event that a petition is denied by CGS, the student can appeal to the departmental Chairperson. See Part A of this handbook for details of that process.

5. Other

- a. *Second-year review:* The second-year review process for the individualized training track consists of a meeting of CGS (the oversight body), soon after the Graduate Research Symposium, in which they discuss the progress of each of the second-year students in the individualized program. The student's mentor will also be present during the discussion of the student. The evaluation will be based on all aspects the student's performance including coursework, research, the first-year project and report, performance at the Graduate Research Symposium, performance in assistantships, engagement in program events such as brown bags and colloquia, and professional behavior. Input will be solicited from RAC members and instructors of courses that the student took. The goal of the second-year evaluation is to assess whether the student seems likely to be in a position to successfully complete the PhD program.

CGS will make a recommendation that (1) the student continue on to the next stage of the program, (2) the student be placed on departmental probation and re-evaluated after a specified period of time during which he/she works to remediate whatever deficiencies were identified, or (3) the student be recommended for termination from the program (provided that the student has not satisfactorily improved performance shortcomings that were previously communicated by the department in writing). Students will receive a written report of the outcome of the second-year review.

- b. *Master's degree:* Students who have passed the second-year review and are continuing on to completion of the PhD are eligible to receive an MA degree, though it is not necessary for the PhD. A student who is terminated from the PhD program at the time of the second-year review (or any other time) may transfer to the MA program and remain in that program through the end of the subsequent term (semester or summer session) if necessary to satisfy the requirements for a Master's degree. Master's degree requirements through the individualized training track include the minimum number of semester hours and their distribution required by the Graduate College, the general requirements described in Part A of this handbook, the statistics requirement described above, and two additional courses.

PART C: A GUIDE TO STUDENT LIFE

1. Organization of the Department

- a. *Department Chairperson:* The department Chairperson (known as the Departmental Executive Officer, or DEO, throughout the University) is appointed by the Dean of the College of Liberal Arts after consultation with the department faculty. The Chair has general executive responsibility for all aspects of the departmental enterprise.
- b. *Associate Chairperson:* The Associate Chairperson is nominated by the Chairperson and confirmed by vote of the faculty. Associate Chairperson assists the Chairperson in various administrative activities and fills in for Chairperson when he or she is absent or unavailable.
- c. *Department faculty:* The faculty of the department include those individuals holding active tenure-track academic appointments whose base salary is established at least in part by explicit action of the department Chairperson. The faculty, acting collectively in duly announced faculty meetings, recommend faculty appointments and promotions and develop and approve proposals for changes in departmental curricula, objectives, organization, and policies.
- d. *Faculty Advisory Committee:* Three members of the faculty serve as the Faculty Advisory Committee, which meets frequently with the Chairperson to exchange views on all matters of concern to the present and future well-being of the department. The members are elected to three-year terms by ballot vote of the faculty. The “Extended Faculty Advisory Committee” includes these three members plus other departmental officers such as the Director of Undergraduate Studies and the Director of Graduate Studies.
- e. *Training Areas and Coordinators:* The graduate program is organized into training areas. Each area is supervised by a training area coordinator who is nominated by the area faculty and appointed by the department Chairperson. The training area recommends student assistantship assignments, sets area curriculum requirements and comprehensive examinations, and monitors student progress and performance. The present training areas are described in Part B: Area-Specific Information.
- f. *Committees on and Directors of Graduate and Undergraduate Studies:* The Chairperson is assisted by a Director of Graduate Studies and by a Director of Undergraduate Studies. The Director of Graduate Studies is supported by the Committee on Graduate Studies, which is made up of faculty members across the department. The Director of Undergraduate Studies is supported by the Committee on Undergraduate Studies, which includes at least three other faculty members. The two directors and the members of the two committees are nominated each year by the Chairperson and confirmed by vote of the faculty.
- g. *Graduate Student Advisory Committee:* The Graduate Student Advisory Committee (GSAC) is established each year to meet periodically with the Director of Graduate Studies, and as necessary with the Chairperson, to exchange views on matters of mutual concern. This committee also works with the Director of Graduate Studies to help with the organization and conducting of events at the new-student interview weekend that is held in the early part of each Spring semester and with the new-student orientation that is held prior to the beginning of each Fall semester. The committee comprises one continuing student from each training area, plus one student from any area selected from the entering class, plus an international student. The members of the committee are to be selected by the groups they represent.

Elections will ordinarily be held late in the spring semester; the representative of the first year class is to be selected within two weeks following registration. If by that time student representatives have not been identified, the department Chairperson will designate appropriate individuals.

- h. Graduate Resources Committee:* The Graduate Resources Committee consists of up to three graduate students who administer various resources that are used solely or primarily by graduate students. These students are elected each year from the entire set of continuing graduate students. Elections will be held at the same time as the elections for the Graduate Student Advisory Committee.
- i. Service Committees:* The department has two service committees, Technical Support and Animal Welfare. Each committee includes three or four faculty members, one of whom serves as chairperson, and one graduate student. The faculty members are nominated each year by the department Chairperson for confirmation by the faculty. The Graduate Student Advisory Committee will, in consultation with the Chairperson, identify a graduate student representative for each of these committees. Committee terms will be for one academic year, but individuals may be reappointed.

2. Financial Support

a. General policies: It is the policy of the department to provide or arrange financial assistance throughout the twelve-month calendar year for each graduate student who is in good standing in the PhD program through at least five years. Whether financial support will be provided during additional years is determined by the Chairperson, acting on a recommendation from the training area coordinator through the Director of Graduate Studies.

Just as advanced students are responsible for their own rate of progress on the dissertation, they are also responsible for obtaining their own financial support beyond the five years that the department guarantees.

b. Sources of support: Student support funds under the direct control of the department come from the College of Liberal Arts and Sciences, from the Graduate College, from federally-supported training grants, and from project grants awarded to individual faculty members. Occasionally, opportunities arise for advanced students to serve as part-time instructors in the regular teaching program of the department. A student may be supported for a semester or two by another unit of the University or by a local agency. Because such arrangements may have direct bearing on student progress and may also have implications for departmental policies, each one must be considered by the training area faculty and by the Director of Graduate Studies.

It is expected that a student considering a support opportunity outside the department will discuss the possibility with the advisor and with the area coordinator well before any commitment is made.

c. Conditions of appointments: Appointments to assistantships or traineeships are for a fixed period, usually one semester but sometimes for longer or shorter periods. Academic year appointments run from the week before classes begin in the fall through the end of finals in the spring; summer appointments are for the duration of the eight-week summer session (or for some other interval in the summer as determined by the source of funding); annual appointments may begin at any time. All graduate assistants receive normal University holidays and two weeks of vacation per year for academic-year appointments or three weeks of vacation per year for annual appointments. The procedure for determining when vacation may be taken is to be specified when the assistantship is offered.

Graduate assistants are professional employees, which means that the number of hours worked in a given week depends on what is required to satisfactorily perform the duties of the position. However, over the term of an appointment, the number of hours worked should average about twenty hours per week for a 50% appointment and proportionately more or less for greater or lesser appointment percentages. At the beginning of the term of appointment, the supervisor should spell out his or her expectations for how the hours to be worked will be allocated. If the requirements of the job to be done turn out to deviate

significantly from these expectations, then new expectations should be set by mutual agreement, if possible. In case of disagreement, the supervisor has the final responsibility for making such decisions but the student may appeal following the procedures of section A.6.b of the Handbook or may file a grievance as specified by University policies and by employment contracts governing graduate assistantships.

Renewal of an appointment for a subsequent period depends on the collective judgment of the faculty concerning the student's performance, progress, and professional conduct. All renewals are contingent on the continued availability of funds for student support.

d. Terminations during the term of an appointment: A graduate student on an assistantship or traineeship may be dismissed during the term of that appointment because of loss of student status. A graduate student also may be dismissed from an assistantship or traineeship appointment during the term of the appointment, without necessarily losing student status, for 1) any reason sufficient to dismiss a faculty member during the term of an appointment, or 2) failure to follow or implement properly and adequately reasonable instructions of the supervisor when such instructions are within the proper scope of the supervisor's duties. Procedures governing termination of an appointment for either of these two reasons are described in Part III, Chapter 12.4 of the *University Operations Manual*.

See *University Operations Manual Part III, Chapter 29.7 Ethics, Part III, Chapter 29.8 Unfitness, and Part III, Chapter 15 Professional Ethics and Academic Responsibility* (<http://www.uiowa.edu/~our/opmanual/iii/15.htm>).

f. Tax status: Federal and state regulations control the withholding of income tax from money paid to students on assistantships, traineeships, fellowships, etc. The tax status of these payments is subject to interpretation by the Internal Revenue Service. Each individual taxpayer, of course, bears the responsibility for filing appropriate income tax reports. At the request of an individual student, the department will provide clarifying information about the payments the student has received, and a statement of the participation requirement for graduate students in the PhD program.

Faculty and staff members in the department cannot—indeed are not permitted to—give tax advice to any individual student or to any group of students, or to offer any assurances about the taxability of payments from any particular source or for any particular purpose.

3. Student Responsibilities

Each student in good standing in the PhD program, regardless of their source of support, is expected as an integral part of graduate training to participate in the research, teaching, and service activities of the department.

- a. *Research activities:* Each student in the PhD program must be actively engaged in research at all times. Initially, this is likely to involve collaborating on research that is directly within the advisor's ongoing research program. More advanced students will develop their own research programs, although this may still involve the advisor and other faculty and students as collaborators. Some of this research will be used to satisfy formal degree requirements, but these particular projects will normally grow out of the student's continuing research activities. The requirement of continual research engagement applies to students whether or not they are presently working to satisfy a specific degree research requirement.

In addition to the student's own program of research, he or she may participate in research assistantship (RA) activities during some semesters. These activities are intended to facilitate the research progress and productivity of the faculty member with whom the student is working. Research assistantship activities are also intended to give the student additional direct and continuing experience in the actual research process from formulation of the study, through collection and analysis of data, to preparation of a scholarly report. The time

involvement, averaging 20 hours per week, will vary substantially during the course of the semester. No formal time records are maintained; the student is expected to see that the commitment to this activity is satisfied. Time spent on assistantship activities is to be distinguished from time spent on the student's own research projects, including thesis or dissertation research, even though in many cases these activities may be closely related. Assignments to research assistantship positions are made by Principle Investigators on the grants that are providing the funds for the assistantship, and in some cases by the Director of Graduate Studies based on the needs of individual faculty members and on the needs of the student for particular types of research training.

The department provides undergraduate students in our large introductory courses with opportunities to participate in research studies. Graduate students engaged in research studies in which undergraduate students participate have the responsibility to see that the experience provided to the participants is of genuine educational value.

All research involving human subjects must be reviewed and approved by the University's Human Subjects Office. Student research projects require a faculty sponsor. For a description of the policies and procedures, see <http://www.vpr.uiowa.edu/hso/>.

The department has no specific allocation of funds for student research, but, funds permitting, does try to help defray exceptional costs of materials, research participants, etc. which are entailed in student research projects. Each request must be considered individually but funds are limited and students and advisors are expected to plan with due regard for costs and to consult as early as possible with the Chairperson about availability of resources. The department has some limited resources for helping students attend certain professional meetings. Inquiries should be directed to the Departmental Administrator. In all cases, student requests must be supported by a faculty member and must be submitted well in advance.

- b. *Teaching activities:* Students will have various opportunities to gain teaching experience: in teaching practica and workshops, area research series presentations, guest lectures in classes, and assignments to teaching assistantships in some semesters. Teaching assistantship (TA) assignments are worked out through consultation among the Director of Graduate Studies, the area coordinators, the individual student, and all faculty members with whom the student may be working. Efforts are made to arrange TA assignments with due regard for other responsibilities the student may have. The time involvement, averaging 20 hours per week, varies substantially during the course of the semester. The student must see that the commitment to this activity is satisfied.

To be eligible for assignment to a teaching position, students must have suitable knowledge and teaching ability. Necessary teaching abilities are greater for discussion leaders than for graders and greater still for those serving as independent instructors. Admission into our PhD program is taken to certify a student as having the knowledge required for teaching general Psychology courses, and admission into a training area similarly certifies the student to have the knowledge required to TA any course taught by faculty members in that area. Satisfactory completion of the Department's TA training requirements is taken to certify a student's teaching ability. In all other cases, judgments of knowledge and ability will be made by the Director of Graduate Studies, in consultation with other relevant faculty. These judgments will be based on many factors, including interviews, letters of recommendation, evaluations from previous teaching supervisors, student evaluations from previous teaching assignments, and specialized training in instruction.

Assignments to instructional positions in the department or in other units of the University require the explicit approval of the student's advisor and the department Chairperson. Such assignments are available only to advanced students having appropriate experience and the

remuneration involved is considered in establishing the total financial support to be received by the student.

- c. *Service activities:* As a rule, all graduate students in residence are required to serve as examination proctors several times each semester. Graduate students also play an important role in the recruiting of new graduate students and are expected to assist the faculty in hosting visits from prospective students. Graduate students will also be asked occasionally to assist the department in handling special events, such as visits by faculty from other universities.

4. STUDENT PERFORMANCE AND PROGRESS

- a. *Student files:* All students will have a cumulative file that records their progress through the program. These files are kept in the main departmental office. Students may review their file at any time. Tenure-line faculty may review any student's file. Materials in the file will include, but are not limited to, the student's original application to the program, confirmation of required meetings (e.g., RAC meetings), confirmation of completed requirements (e.g., comprehensive exams, prospectus defense, etc.), any processes related to the student that occurred (e.g., petition to waive a course requirement), end-of-year letters, and any ad hoc performance reports that were filed by a supervisor.
- b. *Assistantship activities:* Assistantships are professional positions. The faculty supervisor will evaluate the students' performance and provide input to general evaluation mechanisms, such as the end-of-year letter. In addition, ad hoc supplemental reports may be added to a student's file. In such cases, the student will receive a copy and can submit a response that will be filed with the original report. Similarly, graduate students have the option of providing an evaluation of the supervision that they received during their TA/RA assignment. These evaluations will be given directly to the Chair and will be seen only by the Chair and the faculty member being evaluated.
- c. *Professional development:* A student's progress toward the PhD is measured ultimately by the degree to which he or she becomes an independent professional scholar. Although this is difficult to quantify, it is vitally important that the student's advisor and Research Advisory Committee or PhD Committee take full advantage of their expertise to make judgments periodically about the student's professional development in order to provide effective guidance to the student in progressing toward this goal.