



Academic Year 2024-2025

**Psychology Department / Dietrich College Doctoral
Student Handbook**

*Psychology & Cognitive Neuroscience Ph.D.
Degree Programs*

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1 Welcome

While this graduate student handbook is specific to your academic experience in the Psychology Department, there are several other resources and offices graduate students are encouraged to consult during their tenure at Carnegie Mellon University. Information about The Word, the Student Handbook, the Office of Graduate and Postdoctoral Affairs, the Office of the Dean of Students and others are listed below.

- [University-Wide Graduate Student Handbook \(Office of Graduate & Postdoctoral Affairs\)](#)
- [The Word Student Handbook](#)

This handbook is a resource for Psychology graduate students enrolled in one of the Ph.D. programs. It is intended to serve as a guide to provide students with all the information they will need as they move through their program. This includes information about required classes, the teaching practicum, the student/advisor relationship, the evaluation process, and the appeal process. However, individual students should contact their advisor, the Department Head, the Graduate Director, or the Graduate Program Manager if they have additional questions or require clarification about any of the information herein. If there is an overlap with a student's previous training, a requirement can be excused or replaced with an alternative with approval from the Graduate Education Committee. There is also the possibility of tailoring the program to a student's specific training needs. These changes, however, are the exception and can only be made in response to a petition submitted by the student to their advisor, the student's committee, and the Graduate Director, and with final approval from the Graduate Education Committee.

2 Vision, Mission & Values

2.1 Vision

Carnegie Mellon University will have a transformative impact on society through continual innovation in education, research, creativity, and entrepreneurship.

2.2 Mission

The goal of the program is to train graduate students to engage in rigorous, innovative research; to teach how to present this research both orally and in written form; to provide a deep knowledge base in a specific area of study as well as a broad understanding of psychological research outside of that area; and to afford teaching experience in a university setting. The graduate program is based on a mentorship model whereby students work closely with one faculty member in their area, in the context of a committee that consists of other faculty in and/or outside the department.

2.3 Values

Carnegie Mellon's Psychology Department has a long history of innovation and leadership that continues to this day. The department has a focus on cognitive neuroscience, cognitive, developmental, social, health, and educational psychology. A common thread that unites these diverse areas is a deep and fundamental commitment to theoretical and empirical rigor; a focus on psychological, behavioral, social, and biological mechanisms; and potential and actual application. The department remains committed to research excellence and to continue its long history of both determining and adapting to the research frontiers of the future.

3 Degrees Offered

We admit only students intending to complete a Ph.D. in either Psychology or Cognitive Neuroscience. The Psychology Department does not have a Masters program per se. Students who have completed the necessary requirements for the first two years of study may apply to receive a Master of Science degree. Students who wish to apply for the Master of Science degree should contact the Graduate Program Manager. Note that there is no formal transition between the first two years and the subsequent years of study. There also are no qualifying exams for the Ph.D.

The department offers a Certificate in Quantitative Methods. Please see Appendix A for the requirements.

A description of the expected courses to earn the Psychology or Cognitive Neuroscience Ph.D. degree are contained in this handbook.

Full-time/Part-time Status Requirements: All members of the graduate program are expected to be full-time students.

Full-Time Status- All students must be registered for at least 36 units of coursework per semester.

4 Departmental Personnel

- Dean of College or School: Richard Scheines
- College Associate Dean for Graduate Students: Sharon Carver
- Associate Dean for Diversity, Equity, and Inclusion: Ayana Ledford
- Department Head: [Susanne Ferber](#)
- Graduate Student Department/College Support role:
 - Dr. Kasey Creswell and Erin Donahoe will assist graduate students with academic or personal situations that graduate students may not have the resources to resolve on their own.
 - Graduate Director: [Kasey Creswell](#)
 - Graduate Program Manager: [Erin Donahoe](#)
 - GrAdvocate: [Jenah Black](#)
- Faculty: Please visit the following URL:
<https://www.cmu.edu/dietrich/psychology/directory/core-training-faculty/index.html>
- Psychology Department Office location: Baker Hall 346
- Other Staff Resources for Graduate Students
 - [Kathy Majors](#)-Business Manager
 - [Tisha Frisoli](#)- Assistant Business Manager
 - [Becky Finkel](#)-Facilities Coordinator & Department Administrator/Receptionist
 - [Emilie O'Leary](#) - Academic Advisor and Undergraduate Program Coordinator
 - [Lauren McCarthy](#) -Undergraduate Academic Advisor
 - [Kel-Lisa Sebwe](#)- Administrative Assistant (Department Head Assistant)
 - [Rochelle Croom](#)- Administrative Assistant (Transaction Processing)
 - [Terri Jones- Davis](#)- Administrative Assistant (Human Subject & Contractual Agreements)
 - [January Johnson](#)- Research Administrator
 - [Nick Pegg](#)- Computing Support Manager

5 Departmental Resources

This section provides resources and information for the day-to-day life of a graduate student in our department:

- Department Directory- Please see Department Receptionist for updated directory.
- Mailboxes – Baker Hall 336-D, See Department Receptionist.
- Department Computer Clusters – Baker Hall 332-P, hours: 8:00am-5:00pm, with key access after-hours. Please report any problems and/or concerns to Computer Support or psycomp@andrew.cmu.edu. See the Department Receptionist for room scheduling.
- Copy Machine Availability – Baker Hall 342-B, hours: 8:00am-5:00pm (weekdays). Key access after-hours.
- Key/Access Card Distribution – When graduate students begin the program, the Department Administrator or Assistant Business Manager will give them a key to the lounge and copier room, their office, and any other lab or workspace that their advisor requests they need to access. As their studies progress, their advisor or

other faculty or staff with whom they are working can request access to other areas for them, and they can get keys to those areas, as well. If anyone forgets keys or locks themselves out, the Department Receptionist, the Assistant Business Manager, the Administrative Assistant to the Head, and the Computing Support Manager all have master keys to open doors. Keys are stored in the Receptionist's office; both the Department Receptionist and the Assistant Business Manager have access to the key cabinet. No copies of keys are to be made. If keys/access cards are lost, the loss must be reported to the Department Receptionist as soon as possible. When graduate students leave the department, they must turn in all department keys/access cards to the Department Receptionist or Assistant Business Manager.

- Purchasing and Reimbursement Procedures and Policies
 - You can have Becky Finkel help you make large purchases in advance with her use of the department Pcard and travel card (e.g., hotel, airfare); that way you don't have to use your own money to get reimbursed.
 - For other travel expenditures (e.g., ground transportation), keep track of your receipts and submit all expenses via the travel reimbursement form to Becky Finkel ASAP upon your return.
 - If unclear about any reimbursement, please see Becky Finkel in advance for the reimbursement policy document for graduate students.
- Department Office/Building Security, Repairs and Services –Baker Hall exterior doors are open 7:00am – 6:00pm. Entry outside of those hours can be gained with use of the graduate student's University ID card in the card readers or by calling Campus Police: Emergency 412-268-2323 or Non-Emergency 412-268-6232. Any problems with the facilities (burnt-out light bulbs, leaks, damages, needed repairs, etc.) should be reported to the Facilities Coordinator as soon as possible, via email (yrf@andrew.cmu.edu) or phone call (412-268-2781). If it is a facilities emergency, call Service Response at 412-268-2910. First Aid supplies are available in the Department Receptionist's office, and there is an AED outside 342D.
- Graduate Representatives: One student from each area will serve as the representative. This is one of the graduate student service activities (see below for more information about department service). Graduate representatives will solicit feedback and ideas from members of their area to convey to the Graduate Director and Graduate Manager.
- The Diversity & Inclusion Committee: This committee is tasked with advising on and implementing initiatives, within the department, that promote a collegial professional environment where all individuals can thrive free from harassment, intimidation, or disrespect. Kody Manke is the chair of the DEI Committee. For more information the Department's DEI, please visit: <https://www.cmu.edu/dietrich/psychology/diversity/d-and-i-committee.html>

6 Advising

The student is advised by their primary advisor and their committee (committee information is outlined below). If the student wishes to change their advisor, they must notify the Graduate Director as soon as possible. The Graduate Director and Department Head will work with you to identify a suitable advisor within your area of study and help to facilitate a smooth transition. If the potential advisor is outside of your area of study, you must get permission from the Graduate Education Committee.

Faculty meet twice a year to evaluate and discuss graduate student progress. It is in this way that the advising

process is monitored. If students are not making satisfactory progress, their standing in the program changes as described in Satisfactory Academic Standing.

6.1 Advisor Role/Responsibilities

Except during the first month in the program, each graduate student has a faculty advisor who is in their area of study and who is charged with guiding the education and monitoring the progress of the student through the program. This personal student-advisor relationship ensures that every student receives the necessary faculty mentoring. Throughout the program, the advisor is responsible for guiding the student's research and education. Early in the program, the advisor helps with forming the student's committee, guides the student along some research initiatives, and helps with strategic planning for courses and other educational activities. Later, the advisor helps to focus the student's research interests towards a thesis topic. Toward the end of the program, the advisor chairs the student's dissertation committee and helps select the other members of the student's dissertation committee. The advisor also provides the student with career advice. Serving as a primary advisor comes with the expectation that advisors meet regularly with their students, provide guidance to ensure that students are meeting program requirements, provide timely feedback on papers, emails, etc., and cultivate their students' professional development.

Students are admitted to the program with the understanding that they will work primarily with one or two already identified faculty members. Students must officially choose their advisor by October 15. There is flexibility in the type of relationships students have with their advisor(s). Some students work more closely with their advisor(s), some students work more closely with a couple of faculty members on one or more research projects. Students may have two co-advisors.

There are many faculty, both within Psychology and outside Psychology, who have advising privileges and can either function as sole advisors or co-advisors. Students should discuss with the Graduate Student Manager and the Graduate Director who has advising privileges for Psychology graduate students.

6.2 Role and Expectations of the Student

- **Research management, time management, and work expectations:** The student will work with their advisor to establish work expectations and how to manage research. Students are encouraged to meet with their advisor weekly, but the student must meet with their advisor at least monthly. Additional meetings may be scheduled as needed for progress updates, project planning, or addressing specific concerns. In general, the purpose of these meetings is to discuss academic progress and course selections, review research progress and troubleshoot any issues, plan upcoming research activities and timelines, prepare for program milestones, and seek advice on professional development and career planning. Students are expected to come prepared to these meetings (e.g., having relevant materials ready, such as drafts of papers, data analyses, and literature reviews). Time management is often a topic in the professional development seminar. The student should feel free to discuss time management with their advisor, their committee members, and the Graduate Director.
- **Attending conferences and meetings:** The student will work with the advisor to select conferences for which to submit abstracts, present, and attend. The department provides annual travel funding, as documented later in this handbook. [GUSH](#) is an additional funding source for graduate students' travel. All conference submissions and any travel or conference-related purchases must be pre-approved by the

advisor.

- **Coursework:** As noted elsewhere, students must be enrolled in 36 units each semester. Advisors must approve all courses before students are permitted to enroll in them. Students are expected to earn passing grades in their classes (i.e., B- or higher).
- **Communication:** Students are expected to communicate promptly and professionally (e.g., by responding to emails promptly) and bring issues of concern to the Graduate Director, the Gradvocate, or the College Associate Dean for Graduate Students. The student also should expect timely emails from faculty with whom they contact.
- **Confidentiality:** Confidentiality issues regarding research or otherwise should be discussed with the advisor and any concerns should be reported to the Graduate Director.
- **Respect and professionalism:** The Psychology Department's Community Standards emphasize the importance of professionalism, respect, and collaboration among all members. Graduate students are expected to demonstrate integrity, honesty, and ethical behavior in all interactions, ensuring a respectful and inclusive environment. Professionalism involves timely communication, meeting deadlines, and actively participating in academic and research activities. Professional behavior also includes treating all faculty, staff, and students with respect, engaging in constructive feedback, and maintaining a collegial atmosphere. Non-professional behaviors, such as harassment, discrimination, academic dishonesty, and any form of intimidation or bullying, will not be tolerated. Students are expected to familiarize themselves with our Departmental Community Standards document (<https://www.cmu.edu/dietrich/psychology/community-standards.html>) which provides detailed guidelines and expectations. Adherence to these standards is not only expected but will also be a criterion for evaluating graduate students' performance and progression within the program. Graduate students should be proactive in seeking guidance and feedback from faculty and staff and work collaboratively with peers, including undergraduate students, to advance shared goals and contribute positively to the academic community.

Individual Development Plan (IDP)

You and your advisor might want to consider developing an Individual Development Plan (IDP). IDPs are required for students who are funded by the NSF. IDPs are meant to promote professional and personal growth by formally documenting goals and facilitating dialogue, collaboration, and accountability between advisors and advisees. Carnegie Mellon has developed a set of templates that can be used by doctoral students and their advisors to create an Individual Development Plan. You can find the templates here:

<https://www.cmu.edu/graduate/professional-development/index.html>

6.3 Student's Committee

Graduate students are required to have a committee formed by October 31st of their first year of study. The student's committee must consist of an advisor or two co-advisors (of whom one must be a member of the Psychology Department) and at least two additional members of the scientific community. Other than the advisor, at least one committee member must be a member of the Psychology Department at Carnegie Mellon

University. There is no maximum number of members of a student's committee, but approval from the Graduate Director is required if a student's committee totals more than three faculty (other than the advisor/co-advisors). The student should consult with their advisor in selecting members to serve on the committee. The student's advisor and committee jointly meet with the student at least once per semester and provide guidance on the student's research and academic progress. Of course, students are encouraged to meet with their committee more often than once a semester. The student's committee evaluates the student on their progress once per semester in a faculty meeting, and written feedback is provided to the student twice per year (see more on this below).

There is an "open enrollment" period for committee members targeted for students entering their 3rd and 4th year so that their dissertation committee is the best possible fit. That period will be from June 1st to August 23rd. During this time, students are encouraged to think about the composition of their committee and may seek to add or subtract faculty member(s). Students who change a committee member should first talk to the advisor to obtain clearance. Then, they should speak to the faculty member they would like to add to the committee. Once the faculty member agrees to serve on the committee, the student should contact the Graduate Program Manager and Graduate Director to notify them of the change. Students may also wish to remove someone from their committee at this time.

7 Review/Redress of Academic Conflicts

Graduate Student Concerns

If at any time during the program, you have concerns, you should feel free to discuss them with your advisor, your committee members, the Graduate Director, and/or the Graduate Program Manager. If your concerns are of such a nature that you feel uncomfortable with this procedure, the department selects a graduate student each year to serve as a GrAdvocate. You can share your concerns with this person and ask that this person represent your concerns to the Graduate Director and Graduate Education Committee anonymously. If a student is not satisfied with the responses of the people in the Psychology Department, the student can contact Dr. Sharon Carver, College Associate Dean for Graduate Students.

8 Doctoral Degree Requirements

8.1 Residency Requirements

All full-time students are expected to be in residence in Pittsburgh throughout the academic year and during the summer months. If there is any question as to what "in residence" means, it should be discussed with and agreed upon by the advisor and Graduate Education Committee. The critical issue is that the student attends all expected graduate courses, seminars, and functions and is able to perform all TA duties.

8.2 Registration Process/Procedures

Students register online for their own classes with their advisor approval. Information is available at www.cmu.edu/hub/registration. Students register online at www.cmu.edu/hub/sio with an Andrew ID. Please note that the Graduate Programs Office can only register its own students for its own (i.e., 85-xxx) classes.

- Spring 2025 Semester: Registration week is November 18th-November 22nd, 2024.
- Fall 2025 semester: Registration week is April 7th-April 11th, 2025.

PCHE Cross-Registration Process:

Students who wish to take a course outside of Carnegie Mellon at one of the other Pittsburgh Council on Higher Education (PCHE) institutions must obtain a PCHE Cross Registration Request Form from the Psychology Graduate Programs Office, complete it and sign it, and return it to the Psychology Graduate Programs Office for permission and signatures two weeks before the registration period. Only one course outside of Carnegie Mellon is permitted per semester. Students must be registered for 36 units before registering for a course outside of CMU.

8.3 Required Units for Degree Attainment

A typical full-time, graduate course load during each term is 36 units. To obtain a Psychology or Cognitive Neuroscience Ph.D. Degree, students are required to complete 396 units of coursework (3 years X fall/spring/summer + 4th year fall/summer) X 36 units).

8.4 Required Courses & Descriptions for the Psychology and Cognitive Neuroscience Ph.D. Degrees

Over the first two years, depending on the course schedule, the graduate student takes the department's three core courses in psychology. These courses cover the areas of cognitive psychology/cognitive neuroscience, developmental psychology, and social/health psychology. Students also take a research methods course. First-year students also take an undergraduate statistics course (36-749) in the Fall to refresh or learn the basics of statistics. With documentation of prior coursework, this requirement can be waived by the Graduate Education Committee. After that, students are required to take two courses on statistics during their time in the program. The first mandatory course (85-732) is offered by the Department of Psychology and is typically taught in the spring semester. This course focuses on advanced statistics for graduate students in all areas of study. The course assumes a basic proficiency in general statistics and probability theory taught in typical undergraduate statistics courses (and in 36-749) (e.g., distributions, uncertainty estimation, ANOVA), as well as basic familiarity with statistical programming languages (i.e., R). Second, students are required to take one additional 'advanced' statistics course of their choice. This choice should be made in consultation with the student's advisor and the student's committee. It is possible to replace this advanced statistics class with a comparable workshop or class that teaches a specific methodological technique (and consists of the same time and work as a semester-long course). Students who wish to replace their advanced statistics class in this way must have approval from the Graduate Director before registering for the class or workshop. Listed below (see #10) are some of the courses that could satisfy the additional statistics requirement. This list is not exhaustive. Students who wish to take a class not on this list should consult with their advisor and the Graduate Director.

Course Requirements For Psychology and Cognitive Neuroscience PhD Degrees

1. **36-749:** Introductory Statistics: Experimental Design for Behavioral and Social Sciences
2. **85-732:** Data Science Approaches for Psychology

3. **85-710:** Core Course in Developmental Psychology
 4. **85-706:** Core Course in Cognitive Psychology
 5. **85-705:** Core Course in Social/Health Psychology
 6. **85-715:** Graduate Research Methods
 7. **85-716:** Graduate Communication
 8. **85-794:** Teaching Practicum (requires students to TA for three classes)
 9. **85-811:** Professional Development
 10. A more advanced statistics class from the list below.
 - 10-708** - Probabilistic Graphical Models
 - 36-746** - Statistical Methods for Neuroscience and Psychology
 - 36-759** - Statistical Models of the Brain
 - 36-700** – Probability and Mathematical Statistics
 - 36-705** - Intermediate Statistics
 - 85-702-** Multilevel Modeling
- University of Pittsburgh (advanced graduate statistics courses in structural equation modeling, mixed modeling, etc).**
- Another course as determined by the Graduate Education Committee.

Course Descriptions

36-749: Introductory Statistics Course: Experimental Design for Behavioral and Social Sciences)

Description: Statistical aspects of the design and analysis of planned experiments are studied in this course. A clear statement of the experimental factors will be emphasized. The design aspect will concentrate on choice of models, sample size and order of experimentation. The analysis phase will cover data collection and computation, especially analysis of variance and will stress the interpretation of results. In addition to a weekly lecture, students will attend a computer lab once a week.

85-732: Data Science Approaches for Psychology

Description: This course will cover advanced topics in statistics and experimental design necessary for applied research in modern psychology, including information design, exploratory data analysis, data visualization, nonparametric statistics, data and inference errors (multicollinearity, overfitting, Simpson's and Robinson's paradox), sanitization (data anonymization, de-identification), and linear models (including conditional process models). Students will get hands on experience with simulating, analyzing, and visualizing data in the R statistical environment.

85-710: Core Course in Developmental Psychology

Description: This course provides an introduction to central issues in the study of development, especially cognitive development. The two main goals are: 1) to convey to students the issues that are at the heart of the field, and various theories that address those issues; and 2) to familiarize students with key empirical findings in a number of areas in the field. Students are expected to participate actively in class discussions and to read all assigned readings prior to class and to be prepared to intelligently discuss all of them, as well as some of the optional ones. GRADUATE STUDENTS ONLY.

85-706: Core Course in Cognitive Psychology

Description: The themes of the course are: What is the architecture of cognition, and how is it neurally instantiated? The pedagogical goals are to impart basic knowledge of cognitive science and cognitive

neuroscience, while facilitating the transition from basic material in secondary texts to thoughtful analysis and integration of the primary research literature. The course will be divided into five units and a wrap-up session. There will be an evaluation after each unit following the first. GRADUATE STUDENTS ONLY.

85-705: Core Course in Social/Health Psychology

Description: The social core integrates social psychology and health psychology. The goal is to understand (a) the nature of individual differences and how those differences manifest themselves in experience, (b) how to construe different aspects of one's social environment, (c) how the social environment influences thoughts, feelings, and behavior, and (c) how personality factors and situations might interact and combine to determine outcomes. The domains of literature that are examined are traits and dispositions, social support, emotions, interpersonal relationships, social cognition, and health. GRADUATE STUDENTS ONLY.

85-715: Graduate Research Methods

Description: The purpose of this course is to enable students to develop a solid understanding of major methodological issues in the study of psychology. The focus will be on issues and techniques that are especially applicable to cognitive, developmental, social, and neuroscience areas, though many of the issues apply to all areas within the field. GRADUATE STUDENTS ONLY.

85-716: Graduate Communications Course

Description: This is a course designed to improve students' written and oral communication skills. Students will have the opportunity to practice their first- year brownbag presentation multiple times toward the end of the course. Emphasis will be placed on clarity and persuasiveness of both visual and verbal materials.

85-794: Teaching Practicum (requires students to TA for three classes).

Description: Students are required to take the Teaching Practicum class three times during their graduate career at CMU. Students are exempt from participating in the Teaching Practicum their first year but may consult with their committee and request to do so if in good standing. It is expected that students will have a lower course load when they are engaging in the Teaching Practicum.

More detail is provided in the Teaching Practicum below.

85-811: Professional Development

Description: The Professional Development Seminar meets approximately twice a month for 60 to 90 minutes (typically, Fridays 12:30-1:30). The course covers a range of topics of interest to graduate students who are pursuing tenure track academic positions, non-tenure track academic positions, and positions in industry. Topics range from writing, time management, applying for grants, mentoring, conflict management, negotiation, ethical issues in research, work/family balance, and the job application process. These seminars will be led by professionals with appropriate expertise or faculty members, postdocs, and students in the department. Students should feel free to suggest topics of interest.

First year students are required to attend each of these seminars. Other graduate students are required to attend 4 out of 6 or 7 seminars offered each semester. After the first year, students may substitute up to 2 (of the 4 required) seminars with professional development seminars at CMU offered outside of the Psychology Department, with advanced permission from the Graduate Director.

Each year the department invites a number of colloquium speakers to give a lecture to the department. Students are expected to attend these lectures.

85-781: Graduate Reading & Research

Description: This research-based course provides an intellectual foundation for the student to critically evaluate research, to generate ideas for research, to conduct research, and to disseminate research findings. Students engage in these activities with mentorship from their advisor and student's committee members. To this end, it is recommended that students meet with their advisor weekly toward the beginning of their graduate career and at least monthly toward the end of their graduate career.

Additional Course Requirements for the Cognitive Neuroscience Ph.D.:

The Cognitive Neuroscience Ph.D. Program requires that students complete the following courses:

- Foundations of the Neural Basis of Cognition, 86-756 (Fall Semesters)
- Systems Neuroscience, 03-763 (Spring Semesters)
- Advanced Cellular Neuroscience 03-762 (Fall Semesters)
- Computational Neuroscience (at least one of the following)
 - 15-883, Computational Models of Neural Systems (CMU, Every Other Fall Semester)
 - 85-719, Introduction to Parallel Distributed Processing (CMU, Spring Semesters)
 - 36-759, Introduction to Computational Neuroscience: Statistical Models of the Brain (CMU, Fall Semesters)

Any substitutions or exemptions from Cognitive Neuroscience coursework must be recommended by the student's advisor and approved by the Graduate Education Committee.

For more information about the Cognitive Neuroscience course requirements and course descriptions please visit the following URL: <https://www.cnbc.cmu.edu/training/graduate/cnbc-grad-training-program/program-requirements/>

8.5 Expected Timeline for Program Requirements (Year by Year)

(a) First-Year Project, Brown Bag Presentation, & Paper:

Writing up each year's research and presenting it in a seminar is expected to contribute to students' oral and written communication skills.

First-Year Project: The student, in consultation with the advisor, conducts a *minimum* of one research project during the first year, the design of and conduct of which is commensurate with a publishable program of research. The project need not produce publishable results, but the quality of the design and conduct of the study should be high. We strongly urge students to become involved in research as soon as possible after entering the program. Often students feel that they must come up with an original idea on their own for their first-year project. While it is certainly permissible to come up with your own idea for a first-year project (*given approval by the advisor and student's committee*), this is not what the faculty expects in your first year. Indeed, taking this approach may cause you (and perhaps your advisor) considerable anxiety! Rather, we expect that you will work out a mutually agreeable topic and research

plan with your advisor. In this regard, adopting a project suggested by your advisor is perfectly permissible and, in fact, encouraged. It also is permissible to blend some of your interests with those of your advisor to come up with a research plan. We emphasize that getting involved in research *as soon as possible* is the priority. In the first year, becoming involved in research should take precedence over coming up with your own ideas. You will have plenty of time and plenty of encouragement to come up with additional ideas and to carry out additional research as you move along in the program.

Students also are strongly encouraged to conduct more than one research project, so long as taking on additional projects does not interfere with the quality of those initiated earlier.

First-Year Brown Bag Presentation: At the end of the spring semester (typically in early May), students present their first-year research project to the department in what is known as a "brown bag" presentation. The brown bag presentation consists of the project's rationale, methods, results, and implications in a 20-minute conference-like talk. After the talk, there will be 10 minutes for Q&A with faculty, post-docs, and other graduate students.

First-Year Paper: Once the student has presented their brown bag to the department in May, a paper based on the first-year project needs to be submitted to the student's committee by September 15th. Then, the paper needs to be approved by the advisor and the student's committee by September 30th. This means that the student should have given a draft of this paper to the advisor (most likely multiple drafts) considerably prior to this date, leaving time for the advisor to comment on it and for the student to revise and submit it to the student's committee for approval prior to this date. The project should be written up in a journal article format using current APA guidelines. (Keep in mind that sections of the paper, such as the introduction and methods, can be written and turned in for comments long before the final paper is submitted.) Students distribute this paper to all members of their committee for feedback and evaluation.

Approval: Note that "approval" means that the advisor and all members of the student's committee have read and provided comments on the paper and have given it a "pass" grade. When the paper is approved, the student should email the Graduate Manager that the paper has been approved and Cc their advisor and their committee. No formal letter grade is provided for the first-year paper, the second-year paper, the review paper, or the dissertation proposal.

(b) Second-Year Project, Brown Bag, & Paper

Second-Year Project: Research should continue at a vigorous pace during the second year. Once again, in consultation with the advisor, the student conducts a *minimum* of one research project of a standard commensurate with a publishable program of research. Again, the outcome need not be publishable, but the quality of the design and conduct of the study should be high. Again, we emphasize this is a *minimum* requirement. Doing a series of inter-related studies is preferred.

Second-Year Brown Bag Presentation: The student presents a research project to the department members at a brown-bag seminar in the spring. Second-year students should plan on presenting a research project to the department for 20 minutes followed by 10 minutes of Q&A. The format for the second-year brown bag is similar to that of the first-year brown bag.

Second-Year Paper: Once the student has presented the brownbag to the department in May, a paper

based on the second-year project needs to be submitted to your committee by September 15th so that it can be approved by the advisor and student's committee by September 30th. This means that the student should have given a draft of this paper to the advisor considerably prior to this date, leaving time for the advisor to comment on it and for the student to revise it and submit it to the student's committee for approval prior to this date. (Keep in mind that sections of the paper, such as the introduction and methods, can be written and turned in for comments long before the final paper is due.) When the paper is approved, the student should email the Graduate Manager that the paper has been approved and Cc their advisor and committee members.

(c) *Third-Year Paper: Literature Review Paper*

Students are required to write a review paper on a topic related to their research interests. The advisor and student's committee members should be involved in the plans for this project from its inception. The advisor and student's committee must approve the plan for the paper no later than the student's December committee meeting during the third year. All committee members must read and approve the final version of the paper.

The explicit purpose of the review paper is to broaden the student's knowledge of Psychology. The department instituted this in place of requiring qualifying exams. The student, the advisor, and the student's committee should keep this in mind while planning the paper. The paper should be solely authored by the student, although the publication will likely include co-authors.

The review should be of a quality commensurate with published review papers in peer-reviewed journals. Although it is expected that the student will seek feedback from the advisor during the writing process, the student should be the sole author of the paper and should complete the writing independently. In other words, the review paper cannot be the result of a collaborative writing venture with the advisor, such as a book chapter. The final version of the paper must be submitted to the student's committee. The paper needs to be approved by the student's advisor and all the student's committee members by September 30th. When the paper is approved, the student should email the Graduate Manager that the paper has been approved and Cc their advisor and their committee members.

The goal of the literature review is to explore a broader terrain than is ordinarily covered in a specific experimental article and to achieve a wider perspective beyond that normally achieved in focused research projects. The specific nature of the paper may vary from student to student and will be established by students in consultation with the advisor and student's committee. Some students may attempt a literature review in the style of a *Psychological Bulletin* article. Others may undertake a theoretical synthesis of a research area or define a new research issue or question. Others may use the paper as an opportunity to develop a model that covers a range of published findings. Ideally, the resulting work would be submitted as a journal article, serve as a chapter in a book, and/or serve as a basis for new empirical work the student will carry out.

The expectation is that the third-year review paper is completed prior to the dissertation proposal. If a different schedule of activities seems more appropriate for a student, the student (with advisor approval) should submit this request to the Graduate Director who will consult with the Graduate Education Committee.

8.6 Grading System for Research

The advisor provides the grade for the student's research every semester

8.7 Department Policy on Double Counting Courses

There is no double-counting of courses for the requirements.

8.8 Department Policy for Courses Outside the Department/College

Students can elect to take courses outside of the department or college and even take courses at the University of Pittsburgh, assuming that the advisor approved the course(s) as being relevant to the student's program of research and as a priority for that semester's goals. Once gaining approval from the advisor, the student should contact Erin Donahoe to help facilitate this.

8.9 Course Waiver Policy

Students who wish to have a course waived because they have completed comparable coursework prior to their entry into the graduate program must obtain their advisor's approval and petition the Graduate Education Committee. The student should include a letter justifying the waiver request and the course syllabi to document commensurate learning from a previous course.

While course waivers are granted for the introductory statistics course, the Department does not waive the core course requirements or research methods.

Note: Systems neuroscience and cellular neuroscience are waived for MSTP students.

8.10 Protocol for Evaluation of Transfer Credit

The Department may waive a requirement for a student (most often the undergraduate statistics course), but the Department does not typically apply credit earned from other graduate programs or graduate courses to the CMU graduate degree.

8.11 Transfer Courses and Pittsburgh Council on Higher Education (PCHE)

Carnegie Mellon University offers students the opportunity to take courses for credit through a cross-registration program (see Pittsburgh Council on Higher Education (PCHE) and cross-registration below) and through the receipt of transfer credit from other accredited institutions. The Carnegie Mellon University transcript will include information on such courses as follows: Carnegie Mellon courses and courses taken through the university's cross-registration program will have grades recorded on the transcript and be factored into the QPA. All other courses will be recorded on this transcript indicating where the course was taken, but without grades. Such courses will not be considered for academic actions, honors, or QPA calculations.

The Psychology Department will accept grades for transfer courses that the student takes while a member of the CMU graduate program. However, only in exceptional circumstances will the Psychology Department accept grades or credit for transfer courses that were taken before the student became a member of the Psychology Department's graduate program. Students must contact the Graduate Director and the Graduate Program Manager to request transfer credit and/or grades to their transcript.

Criteria used to evaluate transfer credit: Accreditation status of the sending institution (per university policy), course description, learning outcomes, syllabus, student work product. The minimum grade requirement for transfer credit is a B or higher. Courses generally not acceptable as transfer credit include upper level or advanced cognitive, social, health, or developmental psychology courses and research methods.

<https://www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html>

NOTE: Suspended students may take courses elsewhere; however, they may receive transfer credit only if their college's and department's policies allow this.

8.12 Teaching Practicum Requirements

Students are required to take three teaching practicums in Years 2-4 of the program. If students do not have funding for the fifth year (via themselves or their advisor), they will complete a fourth teaching practicum in exchange for funding.

8.13 Research Funding Options

Research Funding Options

Students are required to seek outside funding in their first two years of study – under the direction and guidance of their advisor and their committee—for tuition, stipends, research, and travel. Note that this does not mean that students are required to obtain their own funding. The Department views this as part of the training experience. Students are strongly encouraged to apply for outside funding later in their graduate careers, as well.

Students are typically funded by faculty grants, but the department funds students when faculty grant funding is not available. The summer prior to each academic year the Business Manager notifies the student as to how they will be funded the following academic year.

Information about fellowships available from external agencies can be obtained from the Graduate Program Director.

Resources and Regulations Governing Research at Carnegie Mellon

- Office of Sponsored Programs
<https://www.cmu.edu/osp/>
- Office of Research Integrity & Compliance
<https://www.cmu.edu/research-compliance/index.html>

- Intellectual Property Policy <https://www.cmu.edu/policies/administrative-and-governance/intellectual-property.html>
- Policy on Restricted Research <https://www.cmu.edu/policies/research/restricted-research.html>
- Human Subjects in Research Policy <https://www.cmu.edu/policies/research/human-subjects-in-research.html>

Conducting Research

- Complete the NIH training course on the web (<https://www.citiprogram.org/Default.asp?>). If your affiliation is with CMU, you will need to take the course entitled, "Social & Behavioral Research-Basic/Refresher, Basic Course." This fulfills the human subjects training requirement.
- If you receive NSF or NIH funding you will also need to complete the Responsible Conduct of Research Modules. Provide the Research Requirement Administrator (RRA) with a copy of the completion certificate.
- If you are using participants from the Psychology Department participant pool, you must attend a meeting with the Research Requirement Chair where procedures are reviewed.
- After attending the meeting and completing the training, you will receive a password so that you can post experiments on the web-based system.
- After your experiment has been approved by the CMU IRB, the RRA needs to be added to the study guest list of your IRB approval in SPARCS.

8.14 Internship Opportunities

External Internship Opportunities

The Psychology Department recognizes that an external internship can be a valuable educational and research experience, especially if access to proprietary data is required for the student's research. The summer semester is the optimal time for an internship. Internships during the academic year are rare—the only way to complete an internship during the academic year is to take a Leave of Absence.

You must discuss your plans for an internship with your advisor and your committee members for approval. After approval is received, students must meet with the Graduate Director and Graduate Program Manager to discuss the internship plan. Also, students must be in good academic standing in the program for an internship to be approved by their advisor.

International students are required to consult with the Office of International Education for eligibility for work authorization before starting or seeking an internship/co-op or consulting opportunity. International students will benefit from proactively reviewing OIE guidance regarding off-campus work authorization. Off-campus work authorization processing times can take several weeks or months, and international students will benefit from starting the off-campus work authorization process as early as possible. The dates of the internship must be within the dates of the semester or summer, as determined by the university.

Registering for External Internships

The official course number associated with external internships is 85-798. Advisors are individually responsible for adequately supervising this portion of the program.

85-798, Section I, Grad Internship Course (summer semester only).

International students are required to consult with Office of International Education for eligibility before seeking an internship/co-op or signing an offer contract (required addition to ensure the university is in compliance with immigration laws for F & J status students).

Resources to Help Search for External Internships

- Department Announcements
- University Career Fairs
- Faculty Recommendations
- College Career Services
- Career and Professional Development Center
<https://www.cmu.edu/career/>

9 Ph.D. Dissertation Preparation & Requirements

Conducting a dissertation consists of submitting a dissertation proposal to the students' advisor and committee members and an oral presentation to the faculty, as well as submitting the final dissertation to the student's advisor and committee and an oral presentation (i.e., defense) to the faculty.

9.1 Department All But Dissertation (ABD) Status

Department Criteria for Doctoral Student Status

Once the student completes all of the program requirements, they will be placed in "All But Dissertation" (ABD) status and registered for 36 units. Students are expected to enter ABD status no later than the start of their fifth academic year in order to receive continued support. Students should discuss a timetable with their advisor to achieve this goal. University Policy for Doctoral Student Status

<https://www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html>

All But Dissertation (ABD) Status

Students enter ABD status when they have completed all the requirements of the program except for the dissertation (that is, the proposal and defense of the dissertation). This means that students should enter ABD status after they have completed all of their coursework; the requirements of the 1st, 2nd, and 3rd year; and their TAships.

A Definition of Being In Residence and In Absentia For Candidates

Once students achieve All But Dissertation Status, they must choose whether to complete their dissertation *In Residence* or *In Absentia*. A doctoral student *In Residence* maintains student status and all consequent privileges and continues to be actively engaged with the University. A doctoral student *In Absentia status (ABS)* is one who has left the University with the intent of completing their dissertation but not actively engaged with the University and does not require university resources. When a student decides whether to pursue All but Dissertation *In Residence* or *In Absentia*, they must complete a Doctoral Student Status Agreement form, which is available through their academic department or on the HUB website. Once the agreement has been approved by the department, the student may change their status from *In Residence* to *In Absentia* multiple times. Also note that no student *In Absentia* will be verified by the University as a “student” for immigration or loan purposes. All but Dissertation students in J1 or F1 immigration status must continue to follow the Department of Homeland Security regulations.

Time Limits on Doctoral Candidacy Status

Students may be enrolled in the program for a maximum of 10 years to completion—assuming good standing in the program. The department follows the university’s rules regarding process: (<https://www.cmu.edu/hub/registrar/student-records/abd.html>).

The Tuition and Fees Charged for Candidates in Each Status.

The Doctoral Student Status policy (<https://www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html>) sets forth a definition of All But Dissertation (ABD) status for candidates. Also, the policy includes the tuition and fees charged for candidates in each status.

The ABD Status Agreement Form:

<https://www.cmu.edu/hub/docs/abd-status-agree.pdf>

9.2 Dissertation Proposal

There are two main components of the dissertation proposal: the written document and the dissertation proposal meeting.

Written document. The document should be written in the format of an NIH RO3 or R21 grant. This document should be no more than 6 single-spaced pages (not including references), 12-point font, 1-inch margins. It should contain the following sections:

- Specific Aims
- Research Strategy
 - Significance
 - Innovation
 - Approach (recruitment, procedure, measures, statistical analyses, power, timeline)

An overview of the R03 mechanism can be found here: <https://grants.nih.gov/grants/funding/r03.htm>. The

graduate student website contains samples. By writing the proposal in this format, students gain experience in writing grant proposals. Students should feel free to ask their advisor or the Graduate Director for additional examples of R03 grants. It is in the student's best interest to present drafts of the proposal to the student's committee members for feedback prior to submitting the final version.

If the student uses a format different from the R03 format and/or writes a longer document, the specific format must be agreed upon by the student, the advisor, and the student's committee. In addition, the Graduate Director and Graduate Program Manager should be informed.

Once the written document is finalized (in conjunction with, and following the approval of, the student's advisor), it should be passed on to the student's committee. The student should then schedule a dissertation proposal talk at least two weeks after they have submitted the written document to the student's committee. The student will propose the research to the student's committee and other members of the department. Other students may attend.

Oral presentation and evaluation. This presentation typically occurs during the spring or summer of the third year, leaving time for the faculty to provide critical comments and for the graduate student to benefit from these comments and to revise the proposal as necessary. Note that the proposal can also occur during the fourth year. Each student should discuss with their committee when the dissertation proposal should be completed.

The student should aim to give a verbal presentation of the proposal that lasts approximately 25-30 minutes. They should be prepared to respond to questions from the student's committee, the general faculty, and other graduate students. The meeting should be scheduled for 90 minutes. Students may invite people outside of the department (i.e., family and friends) to the proposal meeting if they have the approval of the advisor and the student's committee members.

The committee is responsible for approving the proposal or determining that it cannot be approved. In the latter case, the student will be directed to revise the proposal for approval at a later date, which will be determined by the student's committee. This process is then repeated until the student's proposal is approved.

*Students should avoid scheduling the dissertation proposal meeting in the summer because many of the faculty will not be able to attend. If the proposal meeting must occur in the summer, students will need to contact their committee members well in advance to obtain their availability.

**Note that the dissertation proposal meeting is expected to take place before the dissertation research has begun or before it has been completed. Students who propose research that they have already completed run a very high risk of student's committee members (and other faculty) requesting modifications.

9.3 Dissertation Document and Defense

It is in the student's best interest to involve committee members in the dissertation research throughout the year—as opposed to waiting until data are collected and the final product is written. Students can schedule more frequent committee meetings or individual meetings with committee members throughout this period of time to make sure that everyone is on the same page as to the theory, methods, analyses, results, and interpretation of results.

Written Document

The dissertation document should be sent to the student's advisor and student's committee at least two weeks before scheduling the private defense. The dissertation document should demonstrate that the student has achieved Ph.D. level research abilities, as judged by the student's committee and the faculty in general. There are no rules about the length of the dissertation or how many experiments or studies should be incorporated. Students should discuss with their advisor what is expected for successful completion of the dissertation. The document itself should be double-spaced and follow APA format. For examples of previous dissertations, students should visit the office of the Graduate Student Manager.

Note: All required changes to the final dissertation document must be made before August 15th (in the summer), September 30th (in the Fall) or February 28th (in the Spring). Students who do not complete these changes before the dates may be liable to pay tuition and fees for the fall/spring/summer semester.

There are now two parts to the dissertation defense, as described below:

Part 1 The Formal Defense

The defense itself is now a private meeting between the candidate and their committee members. Other interested faculty may attend.

The candidate gives the private dissertation defense to their committee two weeks before they schedule the public defense. The dissertation document is also made publicly available to the entire faculty. The expectation, however, is that the student's committee has been involved throughout the process, possibly even reading parts of the dissertation and providing feedback before the defense.

The oral presentation is 15-20 minutes followed by the student's committee members asking questions. Other faculty may ask questions after the student's committee has finished with their questions.

At the end of the session, the student's committee signs off on the dissertation as the final document or requests changes to the document before they approve. If changes are requested, it is up to the student's committee to decide whether they want to see the final document again or if they will leave it up to the advisor to review the final document to ensure that changes have been addressed.

Note: If a student has a pressing deadline by which the dissertation must be approved (i.e., the start of a job), they should be in close communication with their committee members throughout the process so that major issues do not arise during the private defense.

Part 2: Dissertation Showcase: Required for Graduation.

After a successful private defense, the candidate schedules the Dissertation Showcase for the entire department, family, and friends. It is up to the student as to whether this showcase takes place the following week or the following month, but it cannot be scheduled until the student's committee has signed off on the dissertation.

This presentation is between 30 and 45 minutes, followed by 10-15 minutes of (polite) questions from the audience.

The showcase is immediately followed by celebratory cake and champagne, and everyone is invited.

Note: The dissertation showcase is required for graduation.

Note: If a student is joint SDS/Psychology, the policy of the home department prevails.

Deposit Dissertation in KiltHub. Once the dissertation has been approved and all required changes have been made, the student should contact the Graduate Program Manager to arrange a meeting. During this meeting, the Graduate Program Manager will explain the next formal steps to complete the Ph.D. process. Also, students are required to deposit their dissertation into KiltHub Repository. Students will be asked to fill out the KiltHub Thesis and Dissertation Submission Form and return it to the Graduate Program Manager. The Graduate Program Manager will submit your thesis and the form to the Libraries for inclusion to the library catalog and to KiltHub.

Certification of Degree

After the student successfully defends their dissertation and the final document is approved by all the student's committee members, the student emails the Graduate Program Manager (Erin Donahoe) the final document and Cc's all the student's committee members. The committee chair (i.e., the student's primary advisor) must sign the title page. Erin Donahoe then certifies the student via S3.

10 Department Policies & Protocols

10.1 Department Process for Dropping a Course

If students wish to drop one of the entry level courses (one of the three core courses, research methods, one of the two statistics courses), they should submit such a request (with advisor approval) to the Graduate Director who will circulate it to the Graduate Education Committee for approval. Students are also strongly encouraged to discuss any concerns they have about these courses with the Graduate Director. The Graduate Program Manager must be notified to ensure students are enrolled in full-time status after the course drop.

10.2 Process for Withdrawing from a Course

Any student who wishes to withdraw from a course must consult with their advisor first and gain approval. After that, the student will need to notify the Graduate Director and Graduate Program Manager to be informed of the process to withdraw from the course.

10.3 Program Leave of Absence

Any student who wishes to take a leave of absence or return from a leave of absence must consult with the Graduate Director and the Graduate Program Manager. The student will be informed of the process to take or return from a leave of absence from the program during this discussion.

10.4 Withdrawal from Program

Any student who wishes to withdraw must consult with the Graduate Director, the Graduate Program Manager, and the Department Head. The student will be informed of the process to withdraw from the program during this discussion. Withdrawal from the program indicates that the student has no intention of returning.

10.5 Petition Procedures

Students who wish to make changes in any of the graduate procedures or guidelines in this handbook should contact the Graduate Director, who is likely to circulate the request to the Graduate Education Committee and Department Head.

10.6 Process for Completing a Master's Degree Enroute to a Ph.D.

We do not offer a terminal Masters Degree in Psychology, but one can be obtained along the way of the Ph.D. degree. The following requirements must be completed in order to receive a Master of Science Degree in the Psychology Department:

- Completion of a “publishable quality” research paper, although it need not be published. This decision is to be made by the student’s committee.
- Successful completion of the first/second year course requirements.
- All Masters Degrees must be filed with the Graduate Program Manager.

10.7 New Policies

This handbook is updated yearly before the start of the fall semester and is effective through August 15th of the following year. The handbook will be sent out to all faculty and students at the start of each year. When changes to policies are made, we will highlight those changes for easy reference. The information and policies contained in the current handbook are binding.

10.8 Time Away from Academic Responsibilities

Time-off and University Holidays

The Department values wellness, and we believe that it is important for graduate students to take time off for their overall health and for their productivity as graduate students. A general guideline is 4 weeks (Sun through Saturday) of time off that is spread throughout the year in addition to all [CMU holidays](#) (11 specified and 3 floating). This time does not include sick days, bereavement, or emergencies. Graduate students should provide their advisor with a minimum of 1 month notice of the time that they are taking. It is important that students discuss time off with their advisor on a regular basis to see what time off best suits their needs and progress in the program. As being a graduate student is a full-time position, graduate students are expected to continue their research during the summer and academic breaks. How students schedule their on and off time, however, is up

to them. If graduate students have any concerns, they should reach out to the Graduate Director. International students who intend to be away from campus for longer than normal break periods should get approval from their advisor and then consult with the OIE about their status and options.

11 Grading and Evaluation

11.1 Dept./College Grading Scale/System

The department uses the University grading system which ranges from R to A+.

11.2 Department Policy on Grades for Retaking a Course

Students who do not successfully complete a course (grade below B-) can retake the course for credit.

11.3 Department Policy on Pass/No Pass, Satisfactory/Unsatisfactory

Required courses are not offered pass/no pass; students receive a letter grade. Students can take elective courses pass/no pass if they desire.

11.4 Department Policy/Process for Incompletes

Incompletes in a graduate course must be made up the following semester; those that are not fulfilled the following semester will be replaced with the default grade the instructor provided.

11.5 Independent Study/ Directed Reading

Students are enrolled in Independent Research (85-781) each semester that they are enrolled in the program. This covers any independent work and reading. Therefore, there is no independent study or directed reading course.

11.6 GPA Requirements and QPA Requirements for Graduation

There is no QPA requirement for graduation.

11.7 Academic Standings

The student's status can fall under the following headings:

Good standing: A student has met all the requirements stated in the graduate handbook. The student has met regularly with their committee and advisor, engaged in a sufficient level of research, developed (or is in the

process of developing) independent conceptual thinking, established a constructive working relationship with the advisor, and consistently demonstrates respectful/professional behavior with all members of the Psychology Department.

With concerns: A student will be assigned “with concerns” status for one of two reasons.

First, there may be a specific concern that the student has not met a graduate student requirement, as specified elsewhere. For instance, students who fail to have their committee meeting or fail to have their first-year paper, second-year paper, or third-year review paper approved by the advisor and committee by the September 30th deadline will automatically be placed into this standing at that time.

Second, there may be concerns about a student’s overall progress in the program. Students will be placed in this category if they start to show deficiencies over the course of a semester in specific areas (e.g., research progress, course performance/completion, teaching responsibilities, consistently demonstrating respectful/professional behavior with all members of the Psychology Department) or have failed to be responsive to their committee’s suggestions and feedback.

Regardless of which of the two categories applies, students will have one semester to respond to these concerns or they will automatically be placed on probation (see below) at the next graduate evaluation meeting. Thus, students who fall into the first category will automatically be placed on probation at the mid-December meeting if they fail to have their paper approved by their advisor and the committee. * The specific concerns of the committee will be outlined in the evaluation letter along with procedures for remediation and evaluation.

*If there are extenuating circumstances due to physical health, mental health, family or personal emergencies, the advisor and student can petition the Graduate Education Committee before the graduate evaluation meeting to remain in “with concerns” status for an additional semester and not be placed on probation. Workload is not an extenuating circumstance.

Probation: A student is placed on probation after they have been designated “with concerns” status for one semester (which includes the summer) and failed to address those concerns. There are a wide range of behaviors and situations that could result in a student being placed on “probation” status, most of which indicate to the student’s committee that the student is unlikely to complete their Ph.D. and conduct independent research. After you are placed on probation, you have one semester to address the concerns identified. If you fail to address the concerns raised by the end of the next semester, it is grounds for expulsion from the program. Specifically, if you are placed on probation at the end of the Fall semester, you will have until the last day of classes of the following Spring semester to remedy these concerns. If you are placed on probation at the end of the Spring semester, you will have until August 15th to remedy these concerns. In unusual circumstances, the probation period may be extended for one semester given that sufficient progress has been made on the goals set forth in the evaluation letter, as judged by the advisor, the student’s committee, and the Graduate Education Committee. Probation will never be extended beyond that

These behaviors include, but are not limited to:

- an insufficient level of work or progress on research
- an inability to develop independent conceptual thinking
- a non-professional and problematic relationship with the advisor, students, or committee as judged by the committee
- a failure to keep to the university’s community standards or the Carnegie Mellon Code. More details on these can be found at <https://www.cmu.edu/student-affairs/theword/community-standards/index.html>

and <https://www.cmu.edu/student-affairs/theword/code/index.html>

11.8 **Regular Reviews and Evaluations by Department**

Student Evaluation

Students are required to complete a summary of their activities—including research, teaching, TAing, presenting at conferences—two times a year. If a student is not in good standing, then their advisor may request a third self-evaluation within the same year. The summary is to be submitted via the graduate evaluation system (<https://gsaudit.cs.cmu.edu>) and includes goals for the past semester, areas of strength, areas of improvement, advances in professional development, special projects, and goals for the upcoming semester (or summer), grant applications, and completion of required papers. The summary is required to be entered in the online system no later than 1 week prior to the graduate evaluation meeting. It is also expected that the student will present this information at the committee meeting (you may print out this summary from the graduate evaluation system to guide your committee meetings if you wish).

At the end of each semester (end of May for the spring, end of December for the Summer and Fall), the faculty as a whole meet to review each student's performance. Results of the review are communicated to the student in a letter that can be viewed on the online system from the Graduate Director and the Advisor. This meeting serves to monitor the student/advisor relationship, to ensure that students are treated equitably in the evaluation process, and to determine whether the student is progressing adequately in the program. The meeting also serves to bring to the faculty's attention students who are failing to meet formal requirements. For students who are not in good standing at the end of the Spring, the Graduate Education Committee will meet at the end of the summer (August 15th) to evaluate progress in the program and re-assess standing in the program.

Students will be notified about the evaluation meeting date. By the meeting date, students must have filed with the Graduate Program Manager all appropriate documents, including identification of advisor and committee (first year only), statement of committee meeting date(s) and brown bag date, list of completed courses, and next semester/summer plans. Next semester plans must have been approved by the advisor and student's committee.

Each student is assigned a status based on their performance during the previous semester at the Fall and Spring graduate evaluation meetings. Also, as indicated below, this status can be changed at the end of the summer if (a) paper requirements have not been met or (b) the student's committee feels at the end of the Spring Evaluation meeting that summer progress should be evaluated. The student, of course, will be notified about such plans.

******There may be specific circumstances in which a student is automatically placed on probation after violating a university standard of Carnegie Mellon (e.g., stealing money). These circumstances will be evaluated by the Graduate Education Committee.

The specific concerns of the student's committee will be outlined in the probation evaluation letter along with procedures for remediation and evaluation. These concerns must be remedied to the satisfaction of the advisor and the student's committee by a specified date (typically at the end of the semester or at the end of the summer) or the student automatically will be dropped from the program. Exceptions to the policy can only be made with the full approval of the student's committee and the Graduate Education Committee.

Cognitive Neuroscience Ph.D. students will also submit a summary of their activities to the CNBC. The advisor approves the summaries, and they are submitted to the CNBC Graduate Program Manager.

Details on the standings and how they are handled are in the previous section titled, “Satisfactory Academic Standing.”

12 Funding & Financial Support

12.1 Statement of Department Financial Support

The department uses a number of sources to fund graduate students (stipend, tuition, and fees) who are in good academic standing and meet all graduate student requirements, as described elsewhere. These sources include tuition allocations from the administration, training grants, research grants, teaching, departmental funding, and outside fellowships and scholarships. Obtaining support through one mechanism does not typically allow deferral or “banking” of support through a different mechanism. Students are required to seek outside funding – under the direction and guidance of their advisor and their committee—for tuition, stipends, research, and travel in their first two years of study. (Students are encouraged to apply for outside funding later in their graduate school careers, as well). Such funding reduces the burden on research grants, training grants, and department funds. From these various sources, the department has been able to provide four years of tuition and four 12-month stipends for all students (including three summers beginning with the summer following the end of the first year and continuing through the summer following the third year). Importantly, we anticipate continuing our support package at a comparable level for five years providing students remain in good academic standing and fulfill all graduate student responsibilities. We have also been able to provide support for a fifth year, in cases in which the advisor, committee, and student deem that a fifth year is justified to fulfill academic goals. Students entering the program will be informed in advance as to expected funding levels. The department will inform students in writing about any change in anticipated financial support as soon as information is available. In addition, students will be notified in July by the Department Business Manager as to how they will be supported during the upcoming year (i.e., departmental funds, faculty member grant).

Students who enter the fifth year of study without either outside support, support from their advisor, or support from their training program will be required either to teach one undergraduate class or to act as a TA for one class to receive their stipend and tuition. It is the student’s choice which of these two options they wish to adopt to receive their funding for the 5th year, and advisor approval is required. Students who require a 6th year of study must meet with the Department Head to discuss funding options but should be aware that 6th year funding is not guaranteed. International students who have not obtained the fluency required to teach their own course must meet with the Department Head to discuss funding options.

It is expected that students' focus during the graduate years will be on progress toward the Ph.D. To that end, tuition and stipends are granted with the understanding that the student will not be employed outside the department without approval from the advisor, the Graduate Education Committee, and the Department Head. Outside employment includes not only taking on a regularly scheduled job but also repeatedly taking on jobs for pay on an ad hoc basis such that the work is detrimental to the student making good and efficient progress in their coursework, research or teaching. Students who are thinking about engaging in outside employment must discuss their situation with the Department Head and the Graduate Director before agreeing to engage in the work. Given that 12-month stipends are provided, the condition of not accepting outside work extends to the summer. Advisor and student committee-approved internships, as outlined in this document, are an exception.

Graduate student funding for each academic year begins August 16th.

12.2 Stipend

The living stipend will be \$38,000 for the 2024-2025 academic year. The living stipend is paid to you in 24 installments (twice monthly), starting on August 31, 2024. Funding is for 12 months under the assumption that supported students will continue their residency and program of research through the summer months. Importantly, we anticipate continuing your support package at a comparable level for five years provided you remain in good standing and fulfill your teaching and research responsibilities. Please note that students receive their support through combinations of departmental funding, research and training grants, teaching assistantships, and outside fellowships and scholarships. Obtaining support through one mechanism does not typically allow deferral or “banking” of support through a different mechanism.

12.3 Health Insurance Requirement

In addition to the tuition and stipend support referenced above, if you elect to enroll in Carnegie Mellon University’s Student Health Insurance Plan (SHIP), the University will cover 100 percent of the premium cost for your individual coverage under SHIP. While you will have the opportunity to purchase partner, spouse, or dependent coverage under the SHIP plan, the University’s support will be limited to individual coverage. Please note that if you wish to elect the required health insurance coverage under an alternate plan, you will not be eligible for the University support referenced here.

Students need to enroll in SHIP by July 31st each year during their graduate career. To enroll in SHIP, you will need to enroll through Student Information Online by going to the ‘Campus Life’ tab. If students are already insured, they must submit a waiver to University Health Services. Waivers are subject to approval and must be returned to University Health Services by a certain deadline. Students can check to see if their waiver has been granted via Student Information Online by going to the ‘Campus Life’ tab.

Note: the health insurance does not include vision or dental, but you can purchase those directly.

12.4 Types of Department Funding

Students who receive stipends that are paid for or administered by the university should sign up for direct deposit as University payroll is now a paperless system. Stipends are issued semi-monthly. The department stipend is typically set at the NIH level for that year. Students can contact the department head if they wish to know the stipend level for the following year.

All students supported by a training grant, department funds, or a faculty grant will receive the Psychology Stipend (set at \$38,500 for 2024-2025) or the stipend amount specified by the training grant if it exceeds the Psychology Stipend.

Graduate students who independently obtain external funding (e.g., not training grant related) will have 10% of the extramural funding added to their discretionary account in the years they are supported by that fellowship. In addition, the department will match this 10% in a contribution to the Graduate Student Diversity & Inclusion

initiatives fund.

Note that this policy does not affect tuition, fees, or TA responsibilities (e.g., students in their 5th year who are supported by BrainHub/Presidential Fellowship are still expected to TA/Teach once during their 5th year).

The psychology department will cover the following fees each semester:

- Technology Fees
- Student Activities Fees
- Transportation Fees

Conference Funding is a funding application process provided by Graduate Student Assembly (GSA) and the Provost's Office for students or student work groups to attend a conference, whether as a participant or as a presenter. The process is managed by the Office of Graduate and Postdoctoral Affairs. Students can find more information about the application process and deadlines at:

<https://www.cmu.edu/graduate/professional-development/index.html>

12.5 **Travel Funds**

The department has in the past been able to allocate funding for student travel to research-related events. The amount of this funding is subject to yearly allocations by the Head. The Graduate Director will have information about travel funding at the beginning of each academic year. Students can receive travel support for a total of 5 years, beginning in their first year of study. The maximum travel support is \$1,250 per year.

The following rules apply to travel funding:

First year program students can participate in related conferences regardless of whether they submit a proposal or not.

Second to fifth year program students can receive travel toward a conference if they (a) will present at the conference, or (b) applied to present at the conference but their application was rejected. Presenting includes speaking in a symposium or comparable event, presenting a poster, or co-authoring a spoken paper or poster.

Students can split the money across conferences within a year. For example, they can receive amount A for one conference at which they do not present and then add the residual amount (B-A, where B is the total allocation per student per year) in a later conference at which they present. Or they could split amount B across multiple conferences at which they did not present but applied to present.

Advisors must approve the travel request.

The close of the summer semester (August 15th) ends that year's period of travel allowance, and the amount available to the student is reset at that point to the established rate for the new year.

Under certain circumstances, students may apply unused funds from one year to the allowance for the next year's travel. There is a maximum of only a one-year extension on unused funds. Students who wish to apply this policy to their unused funds must have written approval in advance from the Graduate Director; that is, students must inform the Graduate Director in Year X that they would like to use Y amount of their Year X travel support for go to a conference in Year X+1. Students who do not gain approval in advance from the Graduate Director will

not be able to use a previous year's travel support in this way. There are no exceptions to this particular rule.

Exceptions to all these policies are rare. Any request for variance must be made in writing to the Graduate Director at least two weeks prior to the conference in question with copies of that request going to the Head and Graduate Education Committee. To reduce the burden on travel funds, we encourage students to cooperate in driving to nearby conferences, sharing rooms, and so on.

Allocation of travel funds to research: Students may use conference travel funds to support certain aspects of their research instead of applying them to travel to a conference/workshop. The funds can be used to, for example, pay for participants, buy materials, or pay for work by a specialist (e.g., a programmer). Students cannot use the funds to purchase items such as computers or iPads. Students can also apply their 1-time workshop fund in the same way. Students are free to choose this option for as many years as they are here (though it is only open to students in the 2nd year of study and beyond), if students use their funds in this way, they will not be available for that year to travel or at all for the 1-time workshop travel. Ideally, students would exhaust other avenues before they choose this option because travel to conferences is integral in a number of ways to your development as an academic.

For students to use their travel funds or workshop funds to support their research, students must email a paragraph to the Graduate Director of how they plan to use the funds. Once this proposal is approved, students should contact Becky Finkel for reimbursement logistics.

12.6 Workshop Funds

Students will also be funded to attend one workshop on methodology or statistical analysis or a similar meeting to the maximum value of \$1,250 during their time as a graduate student in the department. Note that this funding cannot be put toward attendance at a conference or other research-related expenses. To be eligible, students must present the Graduate Program Manager with information about the date and location of the workshop, and they must specify why they are attending the workshop. Attendance at these workshops must be approved in advance by the Graduate Director and Department Head.

12.7 Discretionary Funds

The department has allocated \$200 discretionary funds to each graduate student to support their research each year (August 16 is year start). These funds are cumulative, meaning that funds not used in one year roll over to the next year.

12.8 Funding Payment Schedule

The graduate living stipends start August 16th each year, and end on August 15th of each year. Stipends are issued semi-monthly. Any stipend increases would apply to the start of August 16th.

12.9 Availability of Summer Employment

During the summer semester, Ph.D. students may choose to either secure an external summer internship or continue research with their advisor. A student must discuss their summer plans with their advisor (and their committee) and register for the appropriate course. A student must register for the Reading & Research course if continuing research with their advisor or one of the internship courses if going on a summer external internship. The student's advisor will determine the pass/fail grade for the semester. The Practicum course, PhD Internship, and the Reading & Research courses will count towards the program research requirements.

International students must contact the OIE regarding their ability to hold employment.

12.10 Requirements for the Continuation of Funding

As stated previously, students receive 4 years of support through one of the previously described mechanisms. If the department is supporting the student in their 5th year, they are required to complete an additional TA practicum to receive that support.

12.11 Procedure for Written Notification of Change in Financial Support

Students entering the program will be informed in advance as to expected funding levels. The department will inform students in writing about any change in anticipated financial support as soon as information is available. In addition, students will be notified in July by the Department Business Manager as to how they will be supported during the upcoming year (e.g., faculty member grant, departmental funds).

12.12 Outside Funding, Fellowship and Scholarship Opportunities

The advisor will work with the student to identify external funding opportunities.

12.13 Department Requirement for Providing Personal Computing Resources

It is expected that all incoming graduate students will receive (one-time) a computer for research and teaching purposes. This is typically a laptop. Given that the computer is expected to suffice for at least four years, the standard model is benchmarked at the approximate cost of a MacBook Air with 16GB RAM and 512GB SSD and AppleCare (currently ~\$2500 in total). Students should consult with their advisors about the most appropriate computer for their specific purposes. The expectation is that faculty advisors will cover the purchase of the computer whenever possible, but that the department will cover the cost when this is not the case. Regardless as to whether the advisor or the department covers the base cost, if a student and advisor concur that a more powerful computer is desirable, then it is expected that the advisor will cover any costs beyond the benchmark. To facilitate this process, during the summer preceding a student's first year, the Graduate Program Manager will contact the students' potential advisor and ask them to reply as to which computer to order and how costs will be covered.

13 Doctoral Degree Completion and Certification

13.1 Standard Degree Requirements & Degree Certification

Carnegie Mellon graduate students are expected to complete their degree requirements within the standard length of time for their program of study as outlined in the relevant Graduate Student Handbook, which is typically five years. Upon completion of the graduate program degree requirements, the degree will be certified by the student's academic program in the semester in which the student completes the requirements.

(a) Early Completion

Graduate students who consider the completion of all degree requirements in less than the standard length of time for their program of study may consult with their degree-granting program or department to determine if early degree certification is allowed and under what circumstances.

(b) Extended or Longer-than-Standard Completion

Longer-than-standard degree completion may occur due to academic interruptions in making progress toward the degree as defined by the academic program, interruptions of full-time study or progress towards the degree due to serious, documented health issues, or other unusual or unforeseen circumstances.

Doctoral students who require an extended period to complete their degree requirements must consult with their academic program, and are subject to the CMU Policy on Doctoral Student Status (<https://www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html>), specifically the "Time to Degree" section.

13.2 Additional Guidance for Students

(a) *Program of Study*

Students seeking guidance about their program of study and degree requirements should consult with their academic advisor and/or appropriate associate dean.

(b) *Financial Aid and Student Account*

The Psychology Department does not offer financial aid beyond the support and resources specified elsewhere, but students may request student loans or other financial aid from other sources. Students are expected to make normal progress toward their degree in order to graduate within the standard timeframe for their program of study. Under U.S. Federal Title IV regulations, student eligibility for federal financial aid is contingent upon enrollment in and successful completion of courses that are counted as credit toward their current degree program. To receive the maximum amount of federal financial aid for which they may be eligible, students must enroll each semester in at least 36 units that count toward their current degree level. (See separate guidance regarding integrated degree completion.)

Students should consult with their designated college liaison in The HUB regarding billing and financial aid, particularly for early completion, longer-than-standard completion, or integrated undergraduate and master's degree programs.

(c) *International Students*

Immigration status for students in F-1 and J-1 non-immigrant status is tied to making normal progress toward completing degree requirements. Therefore, F-1 and J-1 students who are considering completing their degree requirements early, anticipating longer-than-standard completion, or moving from an undergraduate to a graduate student classification (integrated undergraduate-graduate study) should consult with their designated advisor in the Office of International Education (OIE) to ensure compliance with immigration regulations.

13.3 Psychology Department Statute of Limitations

Students are expected to graduate within five years of their start date as a Ph.D. student. In some cases, students require more time to complete their Ph.D. Under these circumstances, the student should meet with their advisor and the Department Head to discuss the expected timeframe for graduation as well as potential funding mechanisms for additional years of study. Note that funding beyond the fifth year is not the “default” assumption. Students should assume that they will need to secure funding beyond their fifth year through mechanisms external to the Department (e.g., pre-doc grants/ fellowships or funding through a faculty member’s research grant). In rare cases, the Department may have teaching needs that a student may fill to provide funding for a 6th year, but this can neither be expected nor assumed. The student must graduate within 10 years of starting the Ph.D. program.

14 Appendix A - Quantitative Methodology for Psychology and Cognitive Neuroscience Certificate

Quantitative Methodology for Psychology and Cognitive Neuroscience Certificate BY DEPARTMENT OF PSYCHOLOGY FOR PH.D. IN PSYCHOLOGY AND COGNITIVE NEUROSCIENCE

Outline of requirements

1. Classes
 - a. 3 upper level classes in statistics/quantitative methodology that are not part of the graduate curriculum, typically including courses in hierarchical or mixed modeling, machine learning, and parallel distributed processing.
 - b. The current graduate curriculum requires 36-749 (Introduction to Statistics), 85-732 (Data Science Approaches for Psychology), and one advanced statistics course which are largely chosen from the same list as this minor.

Note that there is no double counting; these are three additional courses required for the minor on top of the Ph.D. requirement outlined in 1b.

2. Participation in Community for Advanced Methodological Learning (CAMEL) for a minimum of 3 semesters (three-unit course 85-xxx)
 - a. Attendance at CAMEL meetings
 - b. 1 presentation (must notify the Graduate Director that they presented)
 - c. Reaching out to and inviting a speaker

(CAMEL rep records CMU attendance)

3. Completing a project (can be part of thesis) that has a substantial statistical or quantitative method component that extends beyond what is taught in the required statistical coursework. This project is subject to the approval of the faculty advisor, and will fall under Graduate Reading and Research (85-781)

Total Units = 45

3 courses: 3 X 9 units each = 27

CAMEL course for 2 semesters: 3 X 3 units each = 9

Research project = 9 units

Course Selection

The list of courses from which students can select is listed below, including pre-requisites. They are organized by department.

| Course Number | Title | Units | Pre-Req | Department | University |
|---------------|-------|-------|---------|------------|------------|
|---------------|-------|-------|---------|------------|------------|

| | | | | | |
|--------|-----------------------------------------|-----------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------|
| 2035 | Mixed Effects Models | 3 credits | None | Psychology | Pitt |
| 2090 | Structural Equation Modeling | 3 credits | PSY 2005 and 2010 | Psychology | Pitt |
| 2416 | Applied Multivariate Analysis | 3 credits | (PSYED 2410 or EFOP 2410) and (PSYED 2422 or EFOP 2422) | Educational Foundations, Organizations, & Policy (EFOP) | Pitt |
| 3408 | Hierarchical Linear Modeling | 3 credits | PREQ: PSYED 2410 or EFOP 2410 or PSYED 3410 | Educational Foundations, Organizations, & Policy (EFOP) | Pitt |
| 2930 | Advanced topics in statistical methods | 3 credits | None | HEALTH AND REHABILITATION SCIENCES (HRS) | Pitt |
| 05-834 | Applied Machine Learning | 12 | None | HCI | CMU |
| 10-601 | Intro to Machine Learning | 12 | (15122) and (21127 or 21128 or 15151) and (21325 or 36219 or 36225 or 36218 or 36217 or 15259 or 15359) | Machine Learning | CMU |
| 10-605 | Machine Learning with Large Data Sets | 12 | (17214 or 15214 or 15210 or 15211) and (10715 or 10601 or 10401 or 10315 or 10701 or 10301) | Machine Learning | CMU |
| 10-617 | Intermediate Deep Learning | 12 | 10301 or 10315 or 10715 or 10601 or 10701 | Machine Learning | CMU |
| 10-618 | Machine Learning for Structured Data | 12 | 10301 or 10315 or 10715 or 10601 or 10701 or 10401 | Machine Learning | CMU |
| 10-701 | Introduction to Machine learning | 12 | (15122) and (21127 or 15151 or 21128) and (36218 or 15259 or 36225 or 36219 or 15359 or 21325 or 36217) | Machine Learning | CMU |
| 10-703 | Deep reinforcement learning and control | 12 | 10301 or 10315 or 10715 or 10601 or 10701 or 10401 | Machine Learning | CMU |
| 10-707 | Advanced Deep Learning | 12 | 10315 or 10401 or 10601 or 10701 or 10715 | Machine Learning | CMU |

| | | | | | |
|--------|--------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------|
| 10-708 | Probabilistic Graphical Models | 12 | 10315 or 10301 or 10715 or 10701 or 10601 | Machine Learning | CMU |
| 10-725 | Convex optimization | 12 | basic algorithms and data structures, multivariate calculus and linear algebra, basic knowledge of machine learning/statistical prediction algorithms | Machine Learning | CMU |
| 11-724 | Human Language for Artificial Intelligence | 12 | None | Language Technologies Institute | CMU |
| 11-747 | Neural Networks for NLP | 12 | None | Language Technologies Institute | CMU |
| 16-720 | Computer vision | 12 | None | Robotics | CMU |
| 21-670 | Linear algebra for data science | 6 (Mini) | 21373 and 21355 | Mathematical Sciences | CMU |
| 21-671 | Computational linear algebra | 12 | (21242 or 21240 or 21241) and (21269 or 21268 or 21259) | Mathematical Sciences | CMU |
| 24-777 | Neural Engineering | 12 | None | Mechanical Engineering | Pitt |
| 36-600 | Overview of Statistical Learning and Modeling | 12 | basic facility with univariate calculus assumed | Statistics and Data Science | CMU |
| 36-610 | Introduction to Probability Modeling | 9 | None | Statistics and Data Science | CMU |
| 36-617 | Applied Linear Models | 12 | Check with instructor | Statistics and Data Science | CMU |
| 36-618 | Time Series and Experimental Design (would require permission from Statistics) | 12 | minis required; check with department | Statistics and Data Science | CMU |

| | | | | | |
|---------------|--------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------------|-----------------------------|-----|
| 36-700 | Probability and Statistics (Need to check syllabus) | 12 | None | Statistics and Data Science | CMU |
| 36-707 | Regression Analysis | 12 | None | Statistics and Data Science | CMU |
| 36-717/36-718 | Statistical Network Models I / II (and possibly other minis - check department for availability) | 6 | None | Statistics and Data Science | CMU |
| 47-747 | Bayesian Statistics | 6 mini | None | Business Admin (Tepper) | CMU |
| 85-719 | Intro to Parallel Distributed Processing | 12 | Familiarity with differential calculus & cognitive psychology | Psychology | CMU |