

DEPARTMENT OF PSYCHOLOGICAL AND BRAIN SCIENCES

DARTMOUTH COLLEGE

GUIDE TO THE GRADUATE PROGRAM

(for students starting Fall 2015 or later)

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OVERVIEW

The primary goal of the graduate program in Psychological and Brain Sciences (PBS) at Dartmouth is the training of highly-qualified students for productive careers in research and teaching. Only students who intend to pursue the Ph.D. degree full-time are accepted into the program. The program of study involves research, a set of required courses, and advanced electives. Training culminates in the production of a publishable thesis based on original research in the student's chosen field of investigation. Each student is required to work on the thesis in the laboratory of a faculty advisor; this association will determine, to a large extent, the nature of the student's individual course of study. The guidelines that follow have been adopted by the faculty to ensure that each student completing the graduate program will have acquired the necessary skills and knowledge to be effective in research and teaching in their chosen sub-discipline.

The Graduate Program in Psychological and Brain Sciences is divided into three programmatic groups: Cognitive and Computational Neuroscience, Social and Affective Neuroscience, Systems and Behavioral Neuroscience. Although most requirements are similar for the three groups, each group can set independent requirements beyond the minimum standards set by the PBS Graduate Program. Regardless of the group in which the student completes his/her training, the student can opt to follow one of two sets of course requirements to receive his/her Ph.D. in Psychological and Brain Sciences or Cognitive Neuroscience (see Program Requirements section).

To facilitate each student's transition from undergraduate to graduate life, the Chair of the department and the Graduate Chair will be available for advice about general progress and adjustment to academic life.

GRADUATE PROGRAM REQUIREMENTS

Advanced Standing

Students who enter the program with previous graduate training at another institution may be granted credit for certain departmental requirements. The Graduate Committee, in consultation with appropriate faculty members and the Dean of Graduate Studies, will grant such credit. It is the responsibility of the student to request consideration for advanced standing by the end of the Fall term of the first year. Dartmouth stipend eligibility is reduced commensurate with advanced standing.

Coursework

The Department offers several graduate courses each year including the *Proseminar* course (PSYC 100), and *Measurement and Statistics I & II* (PSYC 110 & PSYC 111). Core Courses, Methods Seminars, and/or Content Seminars are offered on a rotating basis.

Each student must take a minimum of 8 courses during his/her time in the program. Some are required and some are electives as follows:

Ph.D. in Psychological and Brain Sciences:

- *Proseminar* (PSYC 100). REQUIRED; taken by all first year students in the fall.
- *Measurement and Statistics I & II* (PSYC 110 & 111). REQUIRED; taken by second year students.
- Core Courses. REQUIRED to take at least 2 of the following:
 - Perception* (PSYC 121)
 - Affective Neuroscience* (PSYC 122)
 - Social Neuroscience* (PSYC 123)
 - Systems Neuroscience* (PSYC 126)
 - Functional Neuroanatomy* (PSYC 127)
 - Cognitive Neuroscience* (PSYC 128)
- Electives. REQUIRED to take at least 3 of the following, one must be a content seminar
 - Methods Seminars (non-exhaustive list):
 - Imaging Methods* (PSYC 160)
 - Computer Programming for Brain Scientists* (PSYC 161)
 - Advanced Statistics* (PSYC 163)
 - Computational Methods* (PSYC 164)
 - Professional Development* (PSYC 167)
 - Content Seminars. REQUIRED to take at least one (non-exhaustive list):
 - Brain Evolution* (PSYC 171)
 - Computational Neuroscience* (PSYC 174)
 - Current Issues in Behavioral Neuroscience* (PSYC 175; topic varies each time this course is offered and it can be taken more than once)
 - Learning and Memory* (PSYC 176)
 - Seminar in Special Topics* (PSYC 179; topic varies each time this course is offered and it can be taken more than once)

PhD in Cognitive Neuroscience:

- *Proseminar* (PSYC 100). Taken by all first year students in the fall.
- *Measurement and Statistics I & II* (PSYC 110 & 111). Taken by second year students.
- *Systems Neuroscience* (PSYC 126)
- *Functional Neuroanatomy* (PSYC 127)

- *Cognitive Neuroscience* (PSYC 128)
- 2 Electives from the following list (non-exhaustive):
 - Programming
Computer Programming for Brain Scientists (PSYC 161)
Machine Learning & Statistical Analysis (COSC 174)
 - Neuroimaging and Data Analysis
Principles of Human Brain Mapping (PSYC 60)
Imaging Methods (PSYC 160)
Computational Methods / Analysis of Neural Data (PSYC 164)
 - The Neural Code
Seminar in Special Topics: Neural Decoding (PSYC 179)

Notes

1. Students can take an additional Core Course as an elective for the Psychological and Brain Sciences PhD, if so desired.
2. Students should communicate with their advisors to devise a curriculum suitable for the student's goals and experience.
3. Students in the Systems and Behavioral Neuroscience group must take PSYC 126.
4. Students may petition to receive credit for courses in other departments by requesting approval from the Graduate Committee before enrolling in the course. The student's advisor and the course instructor must also approve. In general, there is a limit of two graduate courses from outside the department that may count toward fulfilling the course requirements, unless it can be adequately demonstrated that an alternative course design would be a better program for the student.

In addition to courses, all graduate students must attend appropriate area research meetings and departmental colloquia.

Research

All students must have a research advisor of record, typically chosen by students during their first term of residence (many times students will have chosen their advisor prior to their arrival at Dartmouth). All students are encouraged to become familiar with the research programs of all faculty in their chosen subspecialty and should feel free to discuss research-related matters with any member of the faculty. If a student wants to change to a new advisor, this process must be facilitated through the Graduate Committee.

Students are expected to engage in research during each term in the program and must be enrolled in Graduate Research (PSYC 188, 288, or 388) each term. Further, each year all students must submit to the Graduate Committee an updated vita and a written report detailing their research and professional activities during the previous year (see Appendix A). The deadline for this report changes each year but is typically in late April or early May.

Note: The difference between the three graduate research courses above reflects different amounts of course credit. PSYC 188 carries one credit, PSYC 288 carries two credits, and PSYC 388 carries three credits. Students must enroll for a total of three credits each term. For example, if a student is taking a seminar course (which is worth one credit), he/she would also sign up for two credits of research, PSYC 288.

Teaching Apprenticeship Program

Each student will be required to serve as a teaching apprentice (TA) in four courses during his or her graduate training. Students will typically serve as a TA for one or two courses during each of the first three years, although some students, on the advice of their graduate advisor, may spread their teaching over additional years. The Chair of

the Graduate Committee makes TA assignments in the spring for the following summer, fall, winter, and spring terms. Students who enter the program with advanced standing may petition the Graduate Committee for a reduction in teaching commensurate with their previous teaching experience. Note, however, that advanced standing reduces the number of terms that students are eligible for Dartmouth stipends. Students should sign up for PSYC 115 when TA-ing a course.

Specialist Requirement

The Specialist Requirement is designed to ensure that students have basic knowledge in their chosen sub-discipline that prepares them for their pre-dissertation and dissertation research. It consists of a reading list tailored to the student's sub-discipline and a take-home exam based on the readings. This take-home exam must be turned in by the first day of the spring term of their second year.

As soon as a graduate student begins his or her specialization (typically during the spring or early summer of the first year and no later than the start of the fall term of their second year), the student should request, *in writing*, approval for their Specialist Committee (see Appendix C: PBS Specialist Committee Form). The Specialist Committee is comprised of three faculty members from the Program, typically from within the student's section of the program who will prepare, administer, and grade the Specialist Requirement. Two committee members must hold regular (tenure/tenure track) appointments in the Psychological and Brain Sciences Department or be a member of the PBS graduate faculty; the third member may hold a non-regular (e.g., visiting, adjunct, or research) appointment. A fourth member, from outside the Program, may be added if the student's area involves cross-disciplinary work. As far as is possible, the student's request for committee membership will be honored.

Note that the three research areas may have their own specific specialist requirements in addition to the standard exam, described below.

Each member of the specialist committee will provide the student with a reading list that covers the classical literature in their field (i.e., Behavioral, Cognitive, Social). The student completes these readings during the summer, fall, and winter of the second year. Once the readings are completed, the Specialist Committee will submit their take-home exam questions to the Graduate Chair. The Chair will then send the questions to the student; the student should send his or her answers back to the Graduate Chair. Each question will be graded on a scale from 0.0 to 3.0 by ½ point increments. A grade of 2.0 is considered passing. The student must achieve an average grade of 2.0 or higher for the questions submitted by each faculty member. Graders have the right to request a rewrite of any question regardless of the score. If the student does not achieve a passing grade upon rewriting the required questions, he/she may be dismissed from the program.

The Specialist Committee will notify the Graduate Chair of the successful completion of the Exam.

While working on the Specialist Requirement students should enroll in PSYC 117. Typically, all second-year students are enrolled in PSYC 117 during the winter term.

Failure to complete the specialist exam by the first day of the spring term of the student's second year will result in the student receiving a grade of NC for the winter term of PSYC 117 and being placed on academic probation. Failure to complete the requirement before the standing meeting in the student's second year will result in a second grade of NC which results in dismissal from the program.

2nd Year Research Presentation

The ability to conduct research and give presentations on your research is central to success in science. During the spring term of their second year, graduate students are required to give a presentation discussing research they have conducted since arriving in PBS. These presentations will be given to the entire department on a day(s) determined by the Graduate Committee. Presentations must describe research project(s) led by the student. Each presentation should last about ten minutes and the student will then answer questions from the audience. Second-year students should enroll in PSYC 118 during the spring term so that they can receive credit for this requirement. Students who

receive an NC on the Research Presentation during their second year will be placed on probation and must complete the Research Presentation during their third year.

Residence Requirement

To earn the doctorate at Dartmouth, a student must study full-time in residence at Dartmouth for at least six terms (two academic years).

Dissertation

Dissertation committee. At an appropriate time, a student should ask the Graduate Committee, *in writing*, to form a Dissertation Committee of four faculty members (see Appendix D: Request for Approval of the Ph.D. Examination Committee). The PhD examination committee consists of a minimum of three full-time Dartmouth faculty members of which a minimum of two must be from Psychological and Brain Sciences (including the dissertation advisor) as well as an external member with a faculty equivalent research appointment outside of Dartmouth. A student can petition the Graduate School to allow one member of the committee to have an adjunct, visiting, or research appointment; this person does not qualify as an outside member and may not serve as chairperson. The Dean of the Graduate School approves the Dissertation Committee upon recommendation of the Department, and as far as it is possible, the student's preferences are honored. The primary purpose of the Dissertation Committee is to advise the student during the dissertation research and to certify to the Department that the student has written and defended an acceptable dissertation.

Dissertation proposal defense. Prior to undertaking dissertation research, students must submit to their Dissertation Committee a dissertation proposal. This proposal should be in the form of an NRSA proposal (or another format if appropriate). Students are strongly encouraged to submit the proposal to agencies that provide support for graduate students. The student will make a presentation to the Dissertation Committee outlining the proposed experiments. The proposal defense typically takes place in the spring term before the academic year in which the student graduates. The student should expect both to be questioned broadly about his or her field of inquiry and to be questioned about the details of his or her proposed studies. Upon successful defense of the dissertation proposal, the student should complete the PBS Thesis Proposal Approval Form (Appendix E), obtain the signature of their Dissertation Committee chair, and then submit this form to the PBS Department Administrator.

Dissertation defenses. After completing the proposed experiments and writing the dissertation, the student provides the Dissertation Committee with a copy of the dissertation. The dissertation is read by members of the Dissertation Committee and must be acceptable to the Dissertation Committee and, later, to the Faculty of the Department. Once the dissertation is deemed acceptable by the Committee, the student obtains the Committee's approval to proceed with the private dissertation defense. After the private defense is completed and once the dissertation is final, the public dissertation defense can be held. Both the private and public dissertation defenses are required.

Private dissertation defense. The Dissertation Committee conducts a private oral examination of the candidate, in which the candidate must present and defend the dissertation as well as demonstrate in the widest sense that he or she is prepared for a scholarly career in the field. The student must make the final draft of the dissertation available to the Committee two weeks prior to the private oral defense. The private defense must be scheduled prior to the public dissertation defense and allow enough time between the two defenses to complete all requested revisions. If any member of the Dissertation Committee finds that the submitted thesis is inadequate, that member must communicate his/her concerns to the thesis advisor and the other members of the committee. This may result in the cancellation of the private thesis defense, up to 48 hours before the scheduled meeting. In accordance with College policy, it is the responsibility of the Chair of the Dissertation Committee to ensure that all Dartmouth members of the Dissertation Committee are present in the room at the dissertation defense. The Department does not provide travel or housing funds for the external member. As per College policy, the external member may attend the defense in person or via video conference.

After all of the Committee members have approved of the private oral defense and written thesis (pending minor revisions), the student should have each Committee member sign the cover sheet of their dissertation. A

copy of the signed cover sheet must be provided to the PBS Department Administrator. The Department Administrator will then generate a Certification letter to be signed by the Department Chair and presented by the student along with the final printed dissertation to the Graduate School Office. The dissertation must also be approved by the Dean of Graduate Studies in consultation with the Department.

The following Graduate School webpage provides details on proper formatting of the dissertation.

<http://graduate.dartmouth.edu/academics/graduate-school-forms/thesis-and-dissertation-forms>

The Department also requests that students provide one bound hard copy of their dissertation for the Department's library collection.

Public dissertation defense. The student must also present and defend the dissertation in a public colloquium attended by committee members and open to the public. The final dissertation must be submitted to the Graduate School Office no later than the date of the public dissertation defense. A close-to-final draft (pending only minor revisions) must also be available to other faculty members in the department upon request, two weeks prior to the public oral defense. The public dissertation defense should be scheduled for 4pm on a weekday to accommodate faculty teaching schedules.

PROGRAM OF STUDY

The following describes a typical program for a student who enters with the baccalaureate degree. In addition to the information below, students are expected to be enrolled in at least one credit of Graduate Research (PSYC 188, 288, or 388) during every term. Note that the graduate program is active for all four quarters, and graduate students are expected to maintain active research programs and course loads during each term, including summer, and may be called upon to serve as a TA during the summer as well. Students must carry three credits at all times to be considered active in the program and eligible for their stipend. Starting in the second year, students are required to give at least one presentation at one of the research area meetings each year. The 2nd year Research Presentation can fulfill this requirement for second year students.

First Year

First-year graduate students must enroll in the Proseminar (PSYC 100). First-year students also typically enroll in at least one Core Course during their first year.

First-year students are expected to engage in the ongoing activities of a laboratory or research program. This serves to introduce the student to the research going on in his/her mentor's laboratory.

During the summer of the first year, students begin to prepare for the specialist exam which will be completed during the second year.

Second Year

Second-year graduate students must enroll in the two-term sequence in statistics (PSYC 110 and 111). The instructor, in consultation with the Graduate Committee, may excuse a student with exceptional preparation from portions of this sequence. In such instances, the student is expected to enroll in another course or seminar. One or more elements of the required statistical sequence may, on occasion, be bracketed for a year for staffing or scheduling reasons. If this occurs, the student is expected to complete the sequence in the following year.

In the second year, students are expected to continue developing breadth by electing one or more courses/seminars in each term. Seminars may be relevant to a student's area of specialization, but more often they will serve to acquaint the student with areas outside his or her specialty.

In addition to seminars and research, second-year students also enroll in the Specialist course (PSYC 117) while they are completing the Specialist reading and exam. Second-year students should enroll in PSYC 118 during the spring term while they prepare for and complete the second-year research presentation.

Third Year

As in the first and second years, each student will continue to conduct research with a member of the faculty. Students are encouraged to explore research topics that will contribute to the formulation of a dissertation proposal.

Fourth Year and Beyond

The thesis proposal should be presented to the thesis committee before beginning the final academic year in the program. There should be at least one year between the time of the thesis proposal and the thesis defense; exceptions to this timeframe must be submitted in writing and approved by the Graduate Committee.

Research for the dissertation usually comprises the major program of study in the fourth year, although other alternatives are possible with the approval of a student's Dissertation Committee.

While the foregoing represents a typical program, it should be made clear that the Graduate Committee, on behalf of the Department, is prepared to make changes in the program of any student when it considers the educational goals of its students to be advanced thereby.

Requirements for the Master of Arts Degree

These requirements are for either a terminal degree or, for those students intending to complete the Ph.D., an intermediate degree. Continuing students can choose, but are not required, to complete a Master's thesis. *No student will be admitted to the PBS Graduate Program with the expectation that only the Master's would be completed.*

Courses: *Measurement and Statistics (110, 111), Proseminar (100), 2 other courses/seminars*

Specialist: Passed

2nd year Research Presentation: Completed

Thesis: A written Master's thesis, based on a research project completed during the first two years and defended to and approved by a three-member committee.

GENERAL POLICIES

Graduate Grading System

Four grades are used to evaluate the academic work of graduate students: HP (high pass), P (pass), LP (low pass), and NC (no credit). HP will signify work of distinctly superior quality; P will signify work of good quality; and LP will signify work acceptable for graduate credit but in which one or more serious deficiencies were exhibited. NC is to be used when a student's work is so unsatisfactory or incomplete as to receive no credit. ON (ongoing) is used when work for a course is continued from one term to the next and is frequently used for the Specialist course (PSYC 117). ON grades are temporary and are replaced by final grades (HP, P, LP, or NC) once the relevant work is completed.

By current practice of the faculty, P is the modal grade. Students are free to seek oral or written evaluations of course and research work from their instructors to supplement the letter grades received, and members of the faculty are strongly encouraged to provide written evaluations directly to students with copies sent to the Graduate Committee.

Any graduate student who has received more than one LP grade or has received one NC grade will be placed on probation for at least one term.

The PBS Graduate Committee will review the student's progress during the probationary period. At the end of the probationary period, the Committee will inform the Dean of the School of Graduate and Advanced Studies, in writing, as to whether the student has produced coursework and/or research at a satisfactory level. If such is the case the student will be removed from probationary status. If, however, the student has not met the departmental standards for satisfactory progress, the student will be placed in 'unsatisfactory standing' until satisfactory progress is achieved according to the written requirements of the Graduate Committee. A student in 'unsatisfactory standing' is not eligible for federal loans or Dartmouth awards.

A graduate student who receives more than two LP grades or more than one NC grade will be removed from the program.

The primary advisor can petition the PBS Graduate Committee to ask that a student be terminated from the program or moved to the Master's track if an 'unsatisfactory academic standing' has gone unresolved after the probationary measures. In addition, faculty can vote to terminate a student from the program, independent of the student's academic standing, if the faculty believes that the student is failing to make satisfactory progress in research or violates accepted ethical standards of scholarship.

Graduate Representative

Each year all current graduate students will nominate individuals to serve as Graduate Representatives. The nominations will be considered by the Graduate Committee in selecting student representatives (one representative from each research area). The Graduate Representatives will serve as the primary liaisons between the graduate student body and the Graduate Committee regarding graduate program business, policy, and recruiting.

FUNDING

Graduate Student Financial Support

First-year student stipends normally begin September 15 of each calendar year with the result that the first check (for one-half month) is available October 1. When possible, contracts for continuing students are written for twelve months. Students on partial stipends will receive the same monthly stipend, but for fewer months. In the case of students who are in the last year, support normally will be ended June 15th.

There is no guarantee that stipend support will be provided to any student beyond the 4th year in the graduate program. Stipend support after the fourth year can be eliminated independent of the source of the stipend (e.g., Dartmouth DF, NRSA, or funds from faculty grant).

Stipend awards at any level are never made for more than one year. While the department makes every effort to support students in good standing, no firm commitment for continued support can be made.

Following the public defense of the doctoral thesis, a student's stipend will end, at the latest, on the following dates. If a student defends during the Spring term, the stipend will end on June 15th. If a student defends during the Summer term, the stipend will end on September 15th. If a student defends during the Fall term, the stipend will end on December 15th. If a student defends during the Winter term, the stipend will end on March 15th. If a student defends during the Spring term, their health benefits continue through August 31st.

It is the policy of the Dartmouth School of Graduate and Advanced Studies that graduate students who are fully supported (a full tuition scholarship and a full stipend) cannot receive additional payment from Dartmouth College for services rendered. Further, fully supported students should not accept employment outside Dartmouth without the explicit approval of the PBS Graduate Committee and the Dean of the School of Graduate and Advanced Studies.

Travel to Professional Meetings

The Graduate School has limited funds available to cover part of the transportation expenses of graduate students who present papers at professional meetings. Application must be made in writing to the Graduate School Office describing the meeting to be attended, the title of the paper to be presented, and the source of any other travel funds available to the student. This request should be endorsed by the student's advisor or the Chair of the Department.

An annual travel stipend of \$350 is also available through the Department and application for this fund must be made in writing to the Chair of the Graduate Committee. Like Graduate School funds, Department funds are available to pay for travel and conference registration fees for students presenting papers at professional meetings. Students traveling on either Department or Graduate School funds must apply for these funds in advance of their trip and prepare College business expense reimbursement forms, with original receipts, upon the completion of their trip.

GRADUATE STUDENT ASSESSMENT

At the close of each term, the progress of graduate students will be reviewed by the Graduate Committee. At the end of the spring term each year, each graduate student will prepare a progress report (see Appendix A) and submit this report, along with an updated CV, to the Chair of the Graduate Committee and the Department Administrator. Each student's advisor will also prepare a report on the student's progress across the year. Additional evaluation will also come from faculty for which the student has TA'ed. Both of these reports are reviewed by the Graduate Committee and the general faculty. Information from a student's Specialist and Dissertation committees will also be considered in these annual reviews. The faculty will determine whether the student is progressing satisfactorily and will be allowed to continue in the program. Following this evaluation, each student will receive a letter stating his or her standing in the program, as determined by the annual review. In addition, each student will receive from his or her advisor a copy of the advisor's evaluation. It is expected that each advisor will hold a meeting with each student to discuss the past year's progress and goals for the upcoming year.

The faculty has the right to suspend or terminate graduate students who are not making satisfactory progress in courses or in research, or who violate accepted ethical standards of scholarship. Even if grades allow for a student to continue in the program a student may still be terminated based on agreement between the Graduate Committee, Graduate School, and faculty advisor or by a vote of the faculty, taking into account the best interests of the student and the program. The faculty may exercise its right to terminate students who are not on probation or unsatisfactory standing if the faculty believes that a student is unlikely to make satisfactory progress in research or coursework or if the student's behavior indicates to the faculty that the person is unsuitable for an academic career. Decisions to terminate students can be made at any point during the year.

GRIEVANCE PROCESS FOR GRADUATE STUDENTS

Students have the right to appeal all decisions made by the faculty. An overview of the grievance process is given below.

A. Informal Resolution Within Graduate Program/PBS

Whenever possible, students should speak directly to the person who bears responsibility for the complaint or who is the alleged cause of the complaint. If this is not possible or proves unsatisfactory, students should discuss the matter with their primary advisor (or members of their Dissertation Committee). If the matter is not resolved at this stage, students should speak to the Chair of the Graduate Committee and/or the Chair of the Department. Failure to resolve the problem at this level necessitates that the student contact the Assistant Dean of the School of Graduate and Advanced Studies to arrange mediation.

B. Mediation by the Graduate Office

If a satisfactory resolution cannot be reached within PBS, the student may request a meeting with the Dean of the School of Graduate and Advanced Studies to discuss the issue. If the Dean working together with the student and appropriate faculty member(s), or representatives of the department(s) or other programmatic unit(s) is unable to reach a satisfactory resolution, the student can request a formal hearing and ruling by the Dean of the School of Graduate and Advanced Studies and the Committee on Student Grievances.

C. Formal Grievance Hearing

Formal hearings are conducted as described in the Graduate Handbook (see sections titled "Committee on Student Grievances" and "Formal Hearing" under Academic and Conduct Regulations).

APPENDIX A

**Department of Psychological and Brain Sciences
Graduate Student Annual Report**

An editable version of this form will be provided to students each spring. The deadline varies slightly each year, but usually it must be completed and returned to the Graduate Committee Chair and Department Administrator along with a copy of your most recent C.V. by early May.

STUDENT INFORMATION

Student:

Advisor:

Year in Program:

PROGRAM MILESTONES

Second year or beyond, indicate your progress on the following requirements:

Milestone	Deadline	Yes	No
I presented at a research area meeting (CBB, SBS, B4, or the Second Year Research Presentation Day) this year	(annual requirement, second year or beyond)		
I have assembled my Specialist Committee (list names below)	First day of the fall term of your second year		
I entered the program after Fall, 2015 and have completed the essay exam for the Specialist Requirement.	First day of the spring term of your second year.		
I entered the program after Fall, 2015 and presented my research during the 2 nd Year Research Presentation Day.	On specified date during the spring term of your second year.		
I entered the program before Fall, 2015 and have completed Part I of the Specialist Requirement.	Last day of the spring term of your second year.		
I entered the program before Fall, 2015 and have completed Part II of the Specialist Requirement.	First day of the fall term of your third year.		
I have assembled and received approval for my Dissertation Committee (list names below)	Last day of the spring term before your final year in the program.		
I have submitted my dissertation proposal to my Dissertation Committee and received their approval.	Last day of the spring term before your final year in the program.		

UPDATE ON ACTIVITIES

Professional Activities:

Include in this section dates and locations, where appropriate. Common categories include: honors/prizes received, memberships in professional organizations, professional consulting (nature of consulting and time commitment), professional meetings attended, refereeing of journals or reviewer of grants/manuscripts/etc., workshops attended, and other professional activities.

Committee/Administrative Service:

Provide dates and nature of participation, e.g. colloquium committee, computer committee, etc.

Teaching and Research Presentations:

Courses taught/guest lectures and TA duties. Indicate any research talks you gave during the year (e.g. colloquia, brown bags, informal talks, etc.). For conference papers and posters provide name of organization, location, dates, and title. With an asterisk, denote the research presentation in the past academic year that fulfilled your annual requirement to present at a research area meeting (B4, CBB, SBS or Second Year Research Presentation).

Activities related to supervising or assisting undergraduate and graduate thesis and other independent projects:

Provide names of students, dates, and nature of your participation. Include other mentoring duties, such as tutoring and career advising.

Grants/Fellowships for research applied for or received during present academic year:

Include information on organization, title of program, title of project, and status of application (e.g., awarded, denied, approved w/o funding, pending). Indicate your role in the project, e.g., principal investigator, co-principal investigator, recipient, etc. List all current grant support (do not include your advisor's grants if you were not involved in the application process).

Publications and/or other professional works:

Indicate whether the publications were reviewed, invited, etc. Follow APA format for references. Indicate whether papers have been accepted, accepted with revisions, or rejected with invitation to resubmit.

Describe current scholarly work in progress (i.e., manuscripts you are working on):

Include your major research activities (i.e., studies conducted, IRB protocols submitted during the last year).

Describe your major research plans for the next academic year:

Also include any plans for writing or submitting manuscripts or grant applications.

APPENDIX B

Advice and Guidelines for Completing the Dissertation

What is the dissertation?

A thesis should be an original, empirically-based study or series of studies that contribute to knowledge in Psychological and Brain Sciences. In its final form, a dissertation generally includes an extensive literature review relevant to the experiments, a description of methods and results, and a thorough discussion of the findings in the context of the literature. All dissertations at Dartmouth are bound and stored at the library. You may find it useful to review a few recent theses, particularly from this department. Recent theses are available online via the Dartmouth Library at: <https://researchguides.dartmouth.edu/dissertations>.

The Ideal Timeline

In many ways, the dissertation process begins during the summer between the second and third year. Students should be thinking about possible thesis topics during this time, as well as who should be asked to serve on their dissertation committee. You will need to have three members (including your advisor) with appointments in the department and one from outside the department. The outside member may be either from another department at Dartmouth or from another institution but must have training to the level of the Ph.D. After discussing possible committee members with your advisor, you should approach those faculty members yourself to request their participation. Many faculty members will want you to give them at least a general idea of topics you are considering for your thesis. Once faculty members have agreed to serve on the committee, you should forward a list of the names to the Graduate Committee, and complete the formal Request for Approval of the Ph.D. Committee (Appendix D). Remember that your dissertation thesis should be proposed to your committee at least one year prior to your dissertation defense.

Dissertation Proposal

Once you have some idea of the general topic of your thesis, you should talk to your committee members about your plans. You should not become wed to any one specific study or set of studies, but rather you should view your thesis question at the most general level of inquiry. Remember that your committee members are a valuable resource, and even if they are not experts on your specific topic, they will undoubtedly be able to provide general insights about empirical approaches. An outside opinion can often be an especially valuable safeguard against research that is too narrowly focused or that has design flaws that undermine its validity.

Your advisor should be reading preliminary drafts of the proposal as necessary, and once you and your advisor think it is ready, you can give it to your committee members. You should anticipate that the committee members may require revisions (and in some cases substantial revisions) to either the document or to the experiments themselves. Once the Committee approves the dissertation proposal the Committee Chair should sign the PBS Thesis Proposal Approval Form on behalf of the Committee (Appendix E).

Do not wait until you have conducted all of your studies to discuss your findings with the committee members. Also, do not view your proposal as a contract for a specific set of studies conducted in a particular way. When your committee has approved your proposal, it is more like a hunting license, where we all agree that you have an acceptable goal in mind. To achieve your goal, you may have to change your hunting strategies. That is, reasonably, you may want to change the empirical plan in light of the obtained results of your preliminary studies. Your committee should continue to be a resource throughout this process.

Remember that you are trying to answer a specific empirical question. To do so in a satisfactory manner may require you to run more studies than originally intended. You should consult with your committee to reach some agreement about when you have conducted sufficient research to gain closure on your question. In some cases, your data may conform closely with your hypotheses. In other cases, your studies may produce null results. This happens, it's science. Your committee may ask you to try to conduct additional research to understand why this occurred, although the student should appreciate that the committee might rightfully consider a thesis with completely null results perfectly fine and appropriate. The philosophy of the dissertation is that it provides evidence that you are

capable of using the scientific method to assess an empirical question. You should never believe that you are required to produce positive findings to obtain your Ph.D. If you have been communicating with your committee, they will help you determine when your competence has been sufficiently demonstrated and the question has been sufficiently explored.

Writing your thesis

In writing your thesis, your first step should be to obtain the latest formatting guidelines from the Graduate Office. Although you might find some of their guidelines petty and aggravating, they are required by the administration (to facilitate binding and consistency), and faculty members have no power to grant exceptions to the rules.

If you did a good job on your proposal, it should serve as the basis of your introduction. It also makes a great deal of sense to write your methods and results immediately following each study. Thus, ideally, your task at this stage is to organize and synthesize the material from your thesis. Do not be afraid to discuss your ideas for the final document with committee members. Some of them may even be willing (or eager) to read drafts of the thesis. A presentation to your area group or to your lab may help clarify your overall organization of the document.

A good goal is to give your advisor a credible first draft of your thesis during the term *before* the term of your defense. It is in your interest to leave yourself enough time to make the improvements recommended by your advisor before sending it to your committee. Your committee will invariably also ask for revisions and, potentially, additional data or analyses. Note that each revision invariably improves the quality of your manuscript, and this is in your best interest because the ultimate goal is to publish your dissertation research.

Defending your dissertation

Details regarding the defense of your thesis are provided on pages 7-8 of this guide. Please refer to that section for more information about the private and public defenses.

Successful completion of the oral private defense is not guaranteed simply because you produced a satisfactory written document. The oral defense is considered by many of us to be an important rite of passage, not simply a pro forma exercise staged as an obstacle to your graduation. It is your opportunity to demonstrate your expertise in your chosen field, and it allows us to certify that you are a competent scholar in Psychological and Brain Sciences. Therefore, the examination can be very free-ranging, and it is in no way limited to the specific thesis document. Your facility to discuss important issues raised by your thesis and consider your thesis in the broader context of the field is an essential indicator that you are ready to join the community of scholars. Of course, most of the discussion will center on your thesis, but you should be able to discuss the contribution of your dissertation research to the larger field of psychology. It will seldom be the case that the inability to answer a specific question will result in failure. Rather, you should be able to call upon your general knowledge of the field to discuss questions in sufficient depth. The way you approach the answer is as important as the information contained within. It is our expectation that students who have reached this point in their graduate career are fully capable of using the defense to demonstrate their mastery of the field.

Once the committee has voted the successful private defense of your thesis, they will sign the cover page of your thesis (see College format rules) and you can schedule your public defense. It is recommended that you bring your cover page to your private defense, ready for them to sign. After you have obtained the required signatures on the cover page for your dissertation, you should see the PBS Department Administrator to obtain the certification letter for the Council on Graduate Studies which must be signed by the Chair of PBS in order for your degree to be granted. The final dissertation must be submitted to the Graduate School Office no later than the date of the public dissertation defense.

Congratulations!

APPENDIX C

PBS SPECIALIST COMMITTEE FORM

Graduate Student Name: _____

Specialist Committee Members:

Chair

1. _____

Title (Asst. Prof, Assoc. Prof, or Prof.): _____

2. _____

Title: _____

3. _____

Title: _____

Approved by:

Graduate Committee Chair:

_____ Date: _____

Received by Department Administrator:

Note: After filling out this form, obtain the Graduate Committee Chair's signature and turn it in to the PBS Department Administrator.



DARTMOUTH
SCHOOL OF GRADUATE
AND ADVANCED STUDIES

Request For Approval of PhD Examination Committee

Student Name:	
Program:	

Examination committee must include 3 full-time Dartmouth faculty members of which a minimum of two must be from the student's graduate program (including the Dissertation advisor) as well as an external member with a faculty-equivalent research appointment outside of Dartmouth College. The external member may participate in meetings in person or via video conference.

Committee Member #1: Full-time Dartmouth faculty member with faculty appointment in your program

Dissertation Advisor:	
Department:	
Advisor Title:	

(Professor, Associate, Assistant, Adjunct, etc.)

Committee Member #2: Full-time Dartmouth faculty member with faculty appointment in your program

Faculty Name:	
Department	
Faculty Title	

(Professor, Associate, Assistant, Adjunct, etc.)

Committee Member #3: Full-time Dartmouth faculty member (inside or outside your program)

Faculty Name:	
Department	
Faculty Title	

(Professor, Associate, Assistant, Adjunct, etc.)

Committee Member #4: Full-time Faculty member with appointment outside Dartmouth College

Faculty Name:	
Department	
Academic Institution:	
Faculty Title	

(Professor, Associate, Assistant, Adjunct, etc.)

Approval Signatures:

_____	Advisor	Date_____
_____	Graduate Chair	Date:_____
_____	Graduate Office	Date:_____

This form is required by the Office of Graduate Studies. After completing and securing advisor and Graduate Chair signatures, please return to the PBS Department Administrator for transmittal to the Graduate Office.

APPENDIX E

PBS THESIS PROPOSAL APPROVAL FORM

Date: _____

Student: _____

The student named above has submitted and presented a dissertation proposal to their Ph.D. Dissertation Committee and the Committee has reviewed and approved of their proposal.

Our approval of the proposal indicates that we consider it to be a reasonable plan for dissertation research. However, it is also our understanding that the exploratory nature of original research may require revisions to this plan before an acceptable dissertation is completed. For that reason, we expect the candidate to keep the committee informed of experimental results as the program of research progresses.

Print name of Dissertation Committee Chair

Signature of Dissertation Committee Chair
Signed on behalf of the Committee

Note: This form is to be filled out when the dissertation proposal is presented to the dissertation committee. When the proposal is approved by the committee, obtain the signature of the Committee Chair and submit the form to the PBS Department Administrator.