



GRADUATE STUDENT HANDBOOK
2021 - 2022
Department of Psychology
Lehigh University

<https://psychology.cas2.lehigh.edu/content/welcome-graduate-program-psychology>

Version: 11/30/2021

Table of Contents

Graduate Study in Psychology	3
Major Portfolio Items	3
I. The Ph.D. Program	5
Coursework Requirements	5
Research Requirements	7
1. First Year Research Apprenticeship	7
2. Master’s Thesis	7
3. General Exam	9
4. (Third-Year) Independent Scholarly Activity	11
5. Doctoral Dissertation	11
II. The Master’s Program	11
Coursework Requirements	16
III. Students with Prior Graduate Training	17
Pre-dissertation Project	17
IV. Evaluation and Waivers	18
Evaluation	18
Continuation to Doctorate	18
Waivers and Procedure.....	18
V. Additional Information and Advice	19
Graduate Committee	19
Communication with Advisors and Committee	19
Cases of Conflict	19
Colloquia and Research Brown Bag.....	19
Research Funding	20
External Funding	20
Internal Funding.....	21
Certificate in Cognitive Science	22
Conference Travel Support	22
Teaching Opportunities	22
Outside Employment	23
Career Trajectories	23
VI. Contact Information	24

Note. Program requirements described in this document are to be viewed in conjunction with the University rules stipulated by the Graduate and Research Committee [see College of Arts and Sciences Graduate Student Handbook (<http://cas.cas2.lehigh.edu/content/cas-graduate-student-handbook>) and University Course Catalog (<http://www3.lehigh.edu/academics/catalog/default2.asp>)].

Graduate Study in Psychology

Welcome to the Graduate Program in Psychology at Lehigh!

As a graduate student, your primary goals are to develop into an expert scholar with broad and deep understanding of the literature in your area (and related areas), a skilled researcher who is capable of independently conducting studies that make a contribution to your field and/or solve applied problems, a capable teacher who can teach a variety of courses, and a skilled communicator who can inform and persuade diverse audiences. We are committed to providing a supportive, enriching environment that will facilitate your achievement of these goals. But, obviously, achievement of these goals depends a great deal on you.

Recent graduates have identified the following **key competencies** that they acquired in our program that have helped them succeed in academic and non-academic settings:

- Well-rounded background knowledge in cognitive, social, and developmental psychology and expert knowledge in a specific subfield
- Ability to conduct literature reviews and research studies independently and efficiently
- Methodological/statistical expertise
- Writing and science communication skills
- Positive Work Habits Crucial for Being Effective on a Research Team
 - Project/time management skills
 - Ability to take constructive criticism
 - Critical thinking skills

The graduate school years are a time to **develop a portfolio** whose contents will be an indicator of how vigorously and successfully you have pursued the goals and achieved the competencies listed above. The contents of your portfolio will play a major role in determining your professional success, and your success on the job market, whether you are looking for a tenure-track research position, a teaching focused position, a post-doc opportunity, or work in business, government, or other applied settings¹. Here is a non-exhaustive list of the sorts of items that you should keep in mind as you develop your portfolio:

Major Portfolio Items

- **Peer-reviewed articles and book chapters.** Most of these will be co-authored with a faculty member. To produce a body of work that will enable multiple publications, you will need to be an integral part of at least one faculty member's lab, involved with multiple data collection projects each year. Working with more than one faculty member (and/or with other graduate students) is likely to increase your publication rate. Also, when applying for jobs, it will be very helpful if multiple faculty members can provide an informed perspective on your research. Please keep in mind that it is the research done in your first three years of graduate school that is likely to be published or in press by the time you hit the job market.
- **Building a network and becoming known to external colleagues.** A network of colleagues who know and respect your work is very important for your success. A primary way that scholars achieve such recognition, besides publishing, is via conference presentations. At a minimum, you should present at one conference per year. Ultimately, it is desirable to present at several. You should present at "large" conferences (e.g., APS, Cognitive Science Society, SPSP, Psychonomics, SRCD) and also smaller conferences (e.g., EPA, SPSSI). Beyond conferences, you should also consider opportunities for summer training programs, intensive seminar series, and so on. To stay informed about all these things, you should join the relevant professional societies in your discipline (ask your advisor) and read their newsletters and email communications.

¹ See section on Career Trajectories on p. 24

- ***Broad knowledge of your area and related areas.*** The way to achieve this is to read. A lot. Your advisor will provide you with readings, as will your General Exam list. But, becoming widely read is your responsibility. Your reading habits should include following your own interests and inspirations, while also staying abreast of new theory and findings in your field (e.g., peruse the latest editions of the most relevant journals). Your advisor will be delighted to see you bring ideas into the lab from sources that you are reading on your own. As you advance, your advisor will expect you to start making independent contributions of this sort.
- ***Teach a couple of different classes and attain excellent teaching evaluations.*** After you complete your MS degree, you will have multiple opportunities to teach. You should avail yourself of these opportunities and work hard to earn excellent student evaluations. If you gain experience teaching classes that many others do not like to teach (e.g., statistics), this can help you on the job market. Note that even if your career goal is to work at a teaching-oriented institution, teaching experience does not remove the importance of having a record as a researcher (i.e., publications, conference presentations). Likewise, research-focused faculty still have to be excellent teachers!
- ***Development of special expertise that it is not directly tied to your primary research.*** This might include advanced statistical training (e.g., classes in SEM or HLM), training in specialized research techniques (e.g., physiological measures, computational modeling, diary studies), or exploration of literatures outside of psychology (e.g., philosophy, political science, biology). Do not just wait for someone to tell you which of these to pursue. Be proactive and think about what type of scholar and researcher you want to be.
- ***Pursuit of research-related funding.*** In consultation with your advisor, it is expected that you seek funding from various specialized programs that target graduate students, and that you get involved in grant proposals to major federal agencies (e.g., NSF, NIMH, NICHD) or foundations (e.g., Templeton, Ford). Information about these opportunities is disseminated via the professional societies of your area. The university and department also have funds available for graduate student research. See further information in the section on Research Funding on p. 19-21.

As a graduate student, you should focus on developing an impressive portfolio. Your advisor and other faculty will be happy to discuss your portfolio and its development at any time. Competition for jobs is intense, and an outstanding portfolio is essential for success. The psychology faculty are committed to providing an environment of opportunity and guidance that will help you realize your potential and build an admirable portfolio.

To ensure that you are making appropriate progress—and to enable faculty to provide timely feedback on your portfolio—you will submit your CV and a yearly self-evaluation form to the Graduate Director regarding all your portfolio-relevant activities. These documents will be shared with the full faculty, and written feedback will be provided shortly after the end of each academic year. Furthermore, at the end of the third year, you will convene a meeting of the departmental members of your dissertation committee. One part of this meeting will involve you giving a presentation regarding how you have developed your portfolio over your first three years. Based on this presentation, the faculty will give feedback about what you may want to focus on in the future to best meet your professional goals.

Remember that your portfolio is an ongoing, developing collection of work that will accumulate over time. It is something that you will actively work on and strategically develop throughout your years in the program. The sooner you get started, the better, but remember that it takes time. Keep your long-term goals in mind and steadily work toward them!

I. The Ph.D. Program

The Department provides basic training in Human Cognition and Development for all graduate students, as well as the opportunity to specialize in an area covered by our intersecting Cognitive, Developmental, and Social Areas.

Coursework Requirements

Note: Courses should be concentrated in years 1-3

Required courses for the Ph.D. are listed below. These include courses for the M.S. degree taken en route to the Ph.D. Specific requirements for the terminal M.S. are provided later (Table 1, p. 15). These are minimum requirements and students are encouraged to take additional quantitative courses, psychology seminars, and other relevant courses (e.g., in a different department), as interest and opportunity allow. Students should speak with their advisors about appropriate ways (and times) to go beyond minimum course requirements.

In general, students should take 1 or 2 courses per semester. Also, in most cases students should register for 9 credit hours per semester. To reach 9 credit hours, the student should supplement the courses below with the course number most appropriate for their research activities (e.g., PSYC 412: First-Year Project; PSYC 490: Thesis Research; PSYC 461: Research Seminar).

Core Courses (3 courses): Students must take Cognitive Psychology (PSYC 403), Social Cognition (PSYC 406), and Developmental Psychology (PSYC 402). *A grade of B or better is required.* Students earning grades of B- or lower may, at the discretion of the faculty, be allowed to retake the course or perform other remedial work. Students normally take the core courses in their first two years of graduate training.

Statistics/Research Methods (2 courses): A two-semester sequence of statistics/research methods (PSYC 421 and PSYC 422). Students complete this sequence in their first year. Students are also encouraged to take additional statistics/research courses.

Professional Seminar (1 course): This seminar (PSYC 409) covers professional development issues. It is offered for first-year students each fall semester. We sometimes also offer a second professional seminar addressing issues for more advanced students (PSYC 410).

Graduate Seminars (3 courses): In addition to the *three core courses*, students are required to take at least three additional graduate seminars (numbered PSYC 430 and above).

Elective Courses (2 courses): Students must take *at least two additional courses*. These may be other graduate Psychology seminars; graduate courses from another department such as education, sociology, or computer science; or 300-level advanced undergraduate psychology seminars. These elective courses must be approved by the student's advisor.

Beyond meeting the course requirements above, students must be aware of requirements that are levied by the College of Arts and Sciences (CAS), which must be met *in addition to* departmental requirements (see: <https://cas.cas2.lehigh.edu/content/cas-graduate-student-handbook>). For example, the CAS requires a minimum of 30 credits (with additional stipulations regarding course numbers) for the M.S. degree, and 72 post-baccalaureate credits or 48 post-Masters credits for the Ph.D. degree. *University regulations stipulate that the list of graduate courses must be approved by the Doctoral Committee prior to the dissertation defense.*

NAME: _____

Yr. in the Program: _____

Record of Courses Completed en route to the Doctoral Degree

The table below is to assist you, your advisor, and the Graduate Coordinator in monitoring your progress toward completion of required coursework on your path to the Ph.D. degree. You should cut and paste this table into a document that you will periodically be asked to share with the Graduate Coordinator or with your advisor.

	<u>COMPLETED COURSES</u>		<u>UPCOMING COURSES</u>
	Course number & name (e.g., Psyc 406: Social Cog)	Semester & year course was taken	Course # and name for courses to be taken <i>next semester</i>
Stats Course I			
Stats Course II			
Professional Seminar			
CORE course I			
CORE course II			
CORE course III			
Grad seminar I			
Grad seminar II			
Grad seminar III			
Approved course I			
Approved course II			

Research Requirements

Students are expected to be deeply engaged in research throughout their time in the program. Formal research requirements are carried out under the direction of a primary advisor.

Below is a table indicating the timeline for major program research requirements.² As noted in the introduction above, success as a scholar will depend on more than simply meeting these basic requirements. Detailed descriptions of each item in the table can be found beneath the table.

Year in Program	Research Activity	
1	Research Apprenticeship	
2 Fall	Master's Thesis	
Spring	Master's Thesis	Reading for General Exam
Summer	General Exam	
3	Independent Scholarly Activity	
4	Dissertation	
5		

1. First Year Research Apprenticeship

Culminating in a draft of the Master's Thesis proposal

Research Apprenticeship. Starting at the beginning of the first year, every student must become an integral member of at least one faculty lab. This includes attending lab meetings and also meeting individually with your faculty advisor on a regular basis (e.g., roughly weekly) to discuss readings assigned by your advisor that will give you a strong background in their research area. You must also become deeply involved in data collection projects in collaboration with your advisor. Your involvement will likely include being an experimenter, supervising undergraduate experimenters, arranging appointment times for participants (and/or supervising undergraduates in this task), developing study materials, contributing ideas to study design, and so on. In this role, you should acquire working knowledge of the key research "tools" in the lab (e.g., E-prime, Qualtrics, coding procedures, etc.). You should play an active role in acquiring expertise both in the research literature and in the research approaches used in the lab. Finally, toward the end of the spring semester of Year 1, every student must give a departmental Brown Bag presentation describing a study or set of studies with which he or she was involved.

In addition to working with a primary advisor, you are strongly encouraged to work in one or more additional labs, beginning in the first or second year in the program. You can discuss the appropriate timing of this with your primary advisor.

Draft of Master's Proposal. Capitalizing on the knowledge, skills, and refinement of interests that have been gained through the Research Apprenticeship, you should submit a draft of a Master's Thesis proposal to your advisor by June 1 of the first year in the program.

2. Master's Thesis

The Master's Thesis is a major requirement for the M.S. degree which most students acquire en route to the Ph.D. It comprises an empirical study (or a set of studies) that provides evidence of proficiency in the student's content area and in research design and methodology.

Things to Keep in Mind

- a) Students are responsible for knowing and following CAS guidelines. Here is an extremely helpful document: <http://cas.cas2.lehigh.edu/content/masters-thesis-guidelines>. Also, feel free

² This table pertains to students who enter without an MS degree (or whose MS degree is not accepted as equivalent to our own). Students whose MS degree is accepted as equivalent to our own can find their requirements in "Section III. Students with prior graduate training."

- to consult as necessary with MaryAnn Haller, CAS Manager of Graduate Programs.
- a) As noted above, an initial draft of the thesis proposal should be shared with one's advisor by June 1 of Year 1.
 - b) A Masters committee (see below) should be formed at or before the time the initial draft is given to your advisor. The committee will usually receive the proposal after it is revised in consultation with your advisor.
 - c) The Thesis should be completed by end of Year 2.
 - d) You must take at least 3 credit hours of Thesis Research (PSYC 490); you should NOT register for more than 6 hours total.

The Master's Thesis Proposal

- Each student must convene a committee of **at least three members** to supervise the thesis. The committee chair and at least half of the committee must be psychology faculty. Once the proposal is approved, committee membership can only be changed by agreement of all parties. Cases of disagreement must be referred to the Graduate Committee.
- Typically, the student distributes a draft of the proposal to the members of the committee and schedules a proposal meeting when the advisor agrees that an acceptable document has been produced, though ultimately this is the student's judgment (see section on 'Communication with Advisors & Committees' below). The written proposal should be distributed to the members of the committee *at least two weeks* before the proposal meeting.
- At the proposal meeting, the student is typically asked to summarize the rationale and plan for the proposed research. The committee comments on the thesis plan and may make suggestions for possible revisions of the plan.
- Before initiating the proposed work (other than piloting), the proposal must be approved by a majority of the committee.
 - If the proposal is approved substantially as is, data collection may proceed.
 - If relatively minor changes are suggested but the general outline of the proposal is deemed satisfactory, the student in consultation with the advisor incorporates appropriate changes into the proposal. The student distributes the revised proposal to the committee. When written approval of the proposal is obtained from the committee, data collection may proceed.
 - If major changes are considered necessary, a second proposal meeting will be held following revision of the proposal in line with committee recommendations. When written approval of the proposal is obtained from the committee, data collection may proceed.
- A copy of the proposal with committee approval attached should be filed in the Department.
- Institutional Review Board (IRB) approval must be obtained by the student for thesis research.

Completing a Master's Thesis

- A Master's Degree Program Form and an Application for Degree should be filled out at least three months prior to the expected date of graduation. Forms are available on-line: <http://www.lehigh.edu/registrar/forms/forms.html>. (Deadlines are 3/1 for May graduation, 7/1 for September graduation, and 11/1 for January graduation). These forms must be returned to the registrar's office (instructions are on the forms). When completing the Master's Degree Program Form *list only coursework that is necessary for that degree* (additional courses beyond those required for the M.S. should be reserved to count toward the Ph.D. degree).
- Following collection and analysis of the data, the student prepares a draft of the thesis written in journal article format following APA style.
- Typically, a draft of the dissertation is circulated to members of their committee for their written comments or suggestions when the advisor agrees that an acceptable document has been produced, though ultimately this is the student's judgment (see section on 'Communication with Advisors & Committees' below).

- A committee meeting should be scheduled when the draft is distributed to committee members. The committee should be given at least two weeks to read the draft.
- During the committee meeting, with all committee members present, the student presents his/her project for about 10 minutes and then the committee discusses the thesis, asks questions of the student, and provides suggestions for revisions.
- The student then revises the manuscript based on committee member feedback and prepares the next draft of the thesis. (Additional rounds of revision may be required before a final version is approved.) The advisor takes the responsibility to make sure that the suggestions of the various committee members are met, but all committee members should review the final copy before final approval of the thesis.
- Once the committee has approved the final draft, the manuscript is formatted and electronically submitted following CAS graduate degree guidelines. An online submission fee should be paid to the Bursar's Office at this time. Guidelines for formatting and electronic submission can be found at: <http://cas.cas2.lehigh.edu/content/masters-thesis-guidelines>.
- At this stage, an oral presentation based on the thesis is scheduled in the department.
 - The oral presentation may be waived for terminal MS students and may be postponed until the following semester for continuing PhD students if there is insufficient time between completion of the thesis and conferral of the degree.
- Final paperwork should be submitted to the Registrar's Office about 3 weeks prior to conferral of the degree. The precise dates for each semester are given in the University Calendar (can be found at: <http://www.lehigh.edu/~inrgs/>). Final paperwork includes: title page of the thesis, Abstract of the Thesis, original signature sheet with signatures in **blue ink**, and online submission fee receipt. Allow at least 24 hours between electronic submission of the thesis and submission of paperwork to the registrar.
- A bound copy of the entire Thesis, including a copy of the signed signature page is submitted to the Department.

3. General Exam

The General Examination occurs at the end of the summer following Year 2. The aims of the General Exam are to ensure that every student has broad knowledge in his or her area (Cognitive, Developmental, Social), the ability to synthesize ideas and research approaches, and the ability to communicate ideas clearly. The General Exam must reflect independent work of the student.

Students will obtain the General Exam Reading List for their area (i.e., cognitive, developmental or social psychology) at the time they enter the graduate program. The General Exam Committee in each area will review and update their list on a yearly basis. Although the lists will be quite similar from year to year, some changes will occur.

The General Exam Committee for each student comprises all faculty from the student's area. The Committee in each area will write a set of exam questions (different every year) from which students will choose a subset to answer. All questions will require critical analysis and synthesis of the readings. At least one of the questions will prompt students to suggest empirical studies that would make a contribution to knowledge in the area targeted by the question.

The Exam Process

- Students will have 10 days to complete the Exam. General exam questions will be distributed on the Wednesday 2.5 weeks prior to start of Fall classes, and answers will be due 10 days later on Friday.
- Students will receive 4 questions.
 - Three questions will test the breadth of knowledge students have acquired through the reading list and their graduate education. Answers will require synthesis and integration across readings. Students must answer two of the three questions.
 - One question will test the depth of knowledge in a domain that aligns with the student's research focus. This question will require independent and creative thinking and will

prompt students to suggest novel empirical studies that target open questions or resolve controversies.

- Each response is limited to 12-15 pages (double-spaced, 1-inch margins).
- Exams will be assessed by the student's General Exam Committee, who will convene a meeting to discuss the student's performance. The task of the General Exam Committee is to determine whether the student displays learning, thinking, and writing skills sufficient to merit continuation to the Ph.D. – see 'Evaluation Criteria' below.
- To pass the General Exam, the student must be deemed to have performed satisfactorily on all three questions they submit. If performance on one or more questions is not satisfactory, the faculty will determine the student's options consistent with University guidelines. In this case, if overall performance on the Exam is acceptable, the student may be offered the opportunity to rewrite a response or answer a new question. If overall performance is weak, the faculty may determine that the student will not advance to doctoral candidacy. Continuation decisions will also take into account other aspects of the student's performance in the program – see Continuation section (p. 17) below.
- If extenuating circumstances arise after the student has received the exam, that is, during the 10-day exam period, the student needs to inform the Graduate Director immediately and present documentation. If the situation qualifies as an extenuating circumstance, the exam will be terminated and can be taken at a later time within a six-month time period.
- The exam process cannot exceed six months.
- Within two weeks of the student turning in the exam, a *Report on the General Doctoral Examination* must be completed and filed with the department by the student's committee. The student's primary advisor will report the majority decision of the committee to the student and to department faculty.
- Students are encouraged to seek feedback on their performance from all committee members.

Evaluation Criteria

The General Exam Committee will determine whether the student displays knowledge, thinking, and writing skills sufficient to merit continuation to the Ph.D. according to the following sorts of criteria:

- **Knowledge is demonstrated by:**
 - Conveying clear understanding of the assigned articles
 - Accurately describing key theories, concepts, methods and findings from the literature
 - Understanding distinctions between different theories and approaches; demonstrating knowledge about controversies in the field
 - Showing understanding of the development of the field - how knowledge has progressed from 'classic' work to the present
- **Thinking is demonstrated by:**
 - An ability to integrate research findings and ideas - extracting insights that emerge by looking across papers
 - Adopting a critical perspective on theories, methods and findings in the literature; the student should be able to identify the most significant conceptual and empirical strengths *and* shortcomings in a literature
 - Identifying gaps in the existing literature, and posing interesting new research questions
 - Generating novel plausible hypotheses, and proposing good ideas about how to test them
- **Writing skills are demonstrated by:**
 - Clear and concise communication of information and ideas
 - Good organization; logical progression
 - Minimal errors in grammar and spelling

Note that not all of these indicators will necessarily be relevant for each question, but across questions Committees will expect to see evidence of all of these skills.

4. (Third-Year) Independent Scholarly Activity

Following the General Exam, and in addition to intense continued involvement in research studies, students must pursue at least one of the two independent scholarly activities below during their third year. Both options are designed to stimulate the student's growth toward becoming an independent scholar. Also, by completing one of these activities, the student should begin formulating a research question for their dissertation proposal. Thus, for example, the literature review might involve exploring what is already known in relation to a potential dissertation topic; the grant proposal might describe studies that would provide pilot data for a potential dissertation topic. Options:

- (a) **Literature Review.** The student will independently write a brief literature review (≈15 pages). The student should be the intellectual driving force behind the review, choosing the focus and scope. Nevertheless, prior to initiating work on the review, the student should solicit guidance and feedback from the primary advisor and other relevant faculty members regarding their plan.
- (b) **Short Grant Proposal.** The student will independently write a small grant proposal. The scope of the proposal should be roughly equivalent to an NIMH National Research Service Award (NRSA) proposal, which requires a 6-page Research Strategy section. The proposal should reflect the student's own thinking and ability to formulate a programmatic series of studies. After the grant proposal is completed, the student should consult with his or her advisor regarding the suitability of the proposal for actual submission to a funding agency.

Getting Feedback from Multiple Faculty Members

During the spring semester of the 3rd year, each student will select three departmental members to join their dissertation committee. In April of the 3rd year, students will give a presentation—similar in scope to a departmental brown bag presentation—to these faculty members. During this presentation, the student should explain what he or she has learned in the course of writing the literature review or grant proposal, and how the learning experience has moved him or her in the direction of a particular focus for the dissertation. This presentation provides an opportunity to get early input from relevant faculty regarding nascent dissertation ideas.

After discussing the Independent Scholarly Activity and how it connects to a dissertation question, the student will also make a brief presentation (≈15 minutes) to the committee regarding how he/she has built his/her portfolio during the first three years in the program. The committee will provide feedback about how the student may augment the portfolio in years 4-5 with the aim of being a successful job or post-doc applicant.

5. Doctoral Dissertation

Things to Keep in Mind

- a) Ideally, the dissertation will flow out of the third-year scholarly activity or the student's continued exploration of a research topic.
- b) Students are responsible for knowing and following CAS dissertation guidelines. Here is an extremely helpful link <https://cas.lehigh.edu/content/current-students>. Also, feel free to consult as necessary with MaryAnn Haller, CAS Manager of Graduate Programs.
- c) The final oral defense should be held at least a week (although we suggest 2-3 weeks) before the dissertation needs to be filed in the Graduate office to give time for any final revisions to be implemented.

The Doctoral Dissertation is an independent empirically grounded investigation in the candidate's field of research. Although typically experimental, the nature of the research may differ (e.g., analysis of archival data) with the approval of the committee. The dissertation demonstrates mastery of the student's content area and of research design and methodology, and it makes a substantial original scholarly contribution to understanding of the topic under investigation.

The dissertation is supervised by a **Doctoral Committee with *four or more members***, each of whom must have a doctoral degree. Three of these people must be voting members of the Lehigh University faculty, unless written approval of the CAS Dean is obtained to allow one to be drawn from adjunct, professor of practice, lecturer, or courtesy appointees. The committee chair and at least half of the full committee must be full-time Department of Psychology faculty members.

- At least *one member* must be from outside the department. Frequently, the outside committee member is a Lehigh faculty member from another department, but committees may also incorporate additional expertise by adding a member from outside Lehigh. Committee members from outside Lehigh must have a doctoral degree and a current faculty appointment. A dissertation committee member from outside Lehigh must be approved by the dissertation advisor, the other departmental committee members, and by the department graduate committee.
- *The committee should be involved from inception to completion of the project.* Once the proposal is approved, committee membership can only be changed by agreement of all parties. Cases of disagreement must be referred to the Department Graduate Committee.

Students can follow one of three models for the dissertation, (A) Traditional Dissertation: Unpublished Research; (B) Cumulative Dissertation Including Three Peer-Reviewed Articles, or (C) Hybrid Model Including Peer-Reviewed Article(s) and Unpublished Research. Students who consider options (B) and (C) must have at least one paper that will count as part of the dissertation published or in press at the time of the dissertation proposal.

(A) Traditional Dissertation

The dissertation involves original research addressing a specific topic (i.e., an open research question or existing controversy) in the student's field of study. Most of the included work should be empirical in nature (including computational modeling or meta-analytic approaches).

In working with the advisor to develop a proposal, the student explores the general problem area as well as the specific topic that the dissertation research will address. Once the specific question has been articulated, the student proceeds to develop an appropriate methodology and prepares a written dissertation proposal. The judgment as to whether the proposal is suitable rests with the committee. It is clearly within the authority of the Dissertation Committee to reject the proposal, require additional material, or insist on whatever changes it deems necessary.

The final dissertation requires a substantial introductory chapter that places the research in the literature more broadly; describing the background to this work, identifying outstanding problems, and motivating the studies included in the thesis. Additionally, there should be a concluding chapter integrating the major findings, stating succinctly the importance of the studies, and discussing the implications for the overall topic. Although many students will aim to publish their dissertation at some point, publication is not a requirement under the Traditional Dissertation model.

(B) Cumulative Dissertation Including Three Peer-Reviewed Articles

The dissertation involves three peer-reviewed research or theoretical journal articles that are based on work students have carried out while in the Psychology Graduate Program at Lehigh. At least two of the papers must be empirical in nature (including computational modeling or meta-analytic approaches). At least one paper must already be published or in press at the time of the dissertation proposal and the other two must at least be under review at the time of completion of the dissertation (journal submissions must be approved by the advisor). The student must be the first author on at least two of the papers. If the student is not first author on the third paper, a substantial amount of the work in the publication should have been carried out by the student. When papers are coauthored, the contribution of each author (as a percentage and an author contribution statement) must be stated. The three papers do not have to be directly linked to each other, but they should speak to the same topic or overall research question. Any publication that is included in the dissertation must reflect substantively original research beyond research conducted for the masters or any prior degree.

Students should submit a proposal to the Dissertation Committee introducing their topic, briefly describing the publications, and outlining additional empirical studies*, their rationale and journal submission plan. The judgment as to whether the package is suitable rests with the committee. It is clearly within the authority of the Dissertation Committee to reject the proposal, require additional material, or insist on whatever changes it deems necessary.

The final dissertation additionally requires a substantial introductory chapter that places the three papers in the literature more broadly; describing the background to this work, identifying outstanding problems, and motivating the three papers included in the thesis. Additionally, there should be a brief concluding chapter integrating the major findings, stating succinctly the importance of the studies, and discussing the implications for the overall topic. Published papers are appended to the dissertation in their published format.

*If some of the proposed empirical work does not lead to publishable work (e.g., results are inconclusive), students will use the hybrid model (see below) to fulfill the dissertation requirement.

(C) Hybrid Model Including Peer-Reviewed Article(s) And Empirical Research

The dissertation includes a combination of unpublished research and published peer-reviewed journal articles. Most of the included work should be empirical in nature (including computational modeling or meta-analytic approaches). The student must be the first author on at least one of the papers. If the student is not first author on a second paper, a substantial amount of the work in the publication should have been carried out by the student. When papers are coauthored, the contribution of each author (as a percentage and an author contribution statement) must be stated. The paper(s) and additional empirical work do not have to be directly linked to each other, but they should speak to the same topic or overall research question. Any publication that is included in the dissertation must reflect substantively original research beyond research conducted for the masters or any prior degree.

Students should submit a proposal to the Dissertation Committee introducing their topic, briefly describing the paper(s), and outlining additional empirical studies and their rationale. The judgment as to whether the package is suitable rests with the committee. It is clearly within the authority of the Dissertation Committee to reject the proposal, require additional material, or insist on whatever changes it deems necessary.

The final dissertation requires a substantial introductory chapter that places the published paper(s) and unpublished empirical work in the literature more broadly; describing the background to this work, identifying outstanding problems, and motivating the paper(s) and empirical studies included in the thesis. Additionally, there should be a concluding chapter integrating the major findings, stating succinctly the importance of the studies, and discussing the implications for the overall topic. Published papers are appended to the dissertation in their published format.

The Dissertation Process

The Dissertation Proposal

- Typically, the student distributes a draft of the proposal to the members of the committee and schedules a proposal meeting when the advisor agrees that an acceptable document has been produced, though ultimately this is the student's judgment (see section on 'Communication with Advisors & Committees' below). The written proposal should be distributed to the members of the committee *at least two weeks*³ before the proposal meeting.
- At the proposal meeting, the student summarizes the rationale and plan for the dissertation. The committee comments on the dissertation plan and may make suggestions for possible revisions of the plan.

³ This time frame is a suggestion only. This is neither intended to dictate strict guidelines for faculty's activities nor is it intended to guarantee to the students that the time frame is sufficient to meet their deadlines. Rather it should be taken as a reminder that this is a long process and that there are several people involved in it with rather busy schedules and multiple obligations. The key for success is good communication with all the members of the committee.

- Before initiating the proposed empirical work (other than piloting), the proposal must be approved by a majority of the committee.
 - If the proposal is approved substantially as is, data collection may proceed.
 - If relatively minor changes are suggested but the general outline of the proposal is deemed satisfactory, the student in consultation with the advisor incorporates appropriate changes into the proposal. The student distributes the revised proposal to the committee. When written approval of the proposal is obtained from the committee, data collection may proceed.
 - If major changes are considered necessary, a second proposal meeting will be held following revision of the proposal in line with committee recommendations. When written approval of the proposal is obtained from the committee, data collection may proceed.
- A copy of the proposal with committee approval attached must be filed in the Department office. (The relevant form is available at the Department office.)
- Institutional Review Board (IRB) approval must be obtained by the student for Dissertation research.
- Acceptance of the proposal indicates that the committee finds the proposed package to be of suitable scope and quality, if successfully executed, to fulfill the requirement for the Ph.D.

Note: For formal admission to candidacy for the Ph.D. degree, the University requires that the student has passed the General Examination and that a dissertation proposal and a list of courses must be sent to the Associate Dean for Graduate Studies with the signatures of the dissertation committee members (see <https://cas.lehigh.edu/content/current-students>).

Completing the Dissertation

The student is expected to keep the committee members abreast of progress on the dissertation. They should feel free to consult with the members of the committee at various points of the process, but especially at crucial junctures such as the completion of data collection and of writing up parts or the dissertation.

- In writing the dissertation, the student must follow APA journal format and must also abide by the requirements of the University.
- Typically, a draft of the dissertation is circulated to members of their committee for their written comments or suggestions when the advisor agrees that an acceptable document has been produced, though ultimately this is the student's judgment (see section on 'Communication with Advisors & Committees' below). Committee members should be given a minimum of two weeks to read the dissertation and make appropriate comments. Typically, the department members of the committee meet/discuss the draft at this point.
- The student then revises the manuscript based on committee feedback and prepares the next draft. (Additional rounds of revision may be required before the next version is approved.) The advisor takes the responsibility to make sure that the suggestions of the committee members are met, but all committee members should approve the next draft.
- Before the oral defense may be held, a majority of the committee must judge the dissertation to be provisionally satisfactory in substance and general form.
 - If a member of the committee considers the dissertation to be unacceptable, he/she must inform the advisor and a special meeting of the committee may be called. The committee may recommend revisions which may lead to the postponement of the oral defense or may reject the dissertation completely in its present form. However, if, after full discussion, a majority of the committee considers the dissertation provisionally acceptable, the oral defense may be scheduled.
- Besides providing copies to the committee, the student must also submit one copy of the complete dissertation draft to the CAS Graduate office (see Graduate School guidelines) and to the department. To allow time for faculty to read the dissertation, it must be submitted *at least two weeks* before the dissertation defense date is scheduled.

- The defense takes the form of a colloquium, with all committee members present, and is open to the public.
- Following a successful dissertation defense, the **Report on the Doctoral Dissertation Exam** is signed by the committee members. A second form, the **Dissertation Approval form**, may be signed by individual committee members and advisor/chair after the defense or after completion of any remaining revisions to the manuscript (see below). The advisor is responsible for handling these official forms.
- After the oral defense, the student must make any revisions to the dissertation required (or suggested) by the committee. The advisor reviews the revised dissertation and consults with committee members to make sure that the required changes have been made. The student distributes this copy to the committee members.
- Only when the Dissertation Approval Form has been signed by *all* members of the committee is the student ready to file the “perfect copy” dissertation with the Graduate office.
- Following approval, two unbound copies of the dissertation, together with a copy of the Report on the Doctoral Dissertation Exam and Dissertation Approval forms signed by the committee members are sent to the CAS Graduate Studies office.
- A bound copy of the dissertation must also be deposited in the Department of Psychology office.

Note: *It is the student's responsibility to ensure that all other University requirements are satisfied in this process (again see: <https://cas.lehigh.edu/content/current-students>).*

II. The Master's Program

The M.S. degree is mainly awarded to students in the process of working towards their Ph.D., as previously explained. However, a few qualified students may aim to gain only a Master's degree. The M.S. program in Psychology is research-oriented and is well suited to provide a strong foundation for students who seek entry into Ph.D. programs in most subfields of psychology. The program also serves the needs of students who are unsure of their future professional goals, desire a more gradual transition between undergraduate and Ph.D. level work, and/or seek a terminal Master's degree. While the program is not designed to provide terminal training for mental health professionals, some graduates may continue on to Ph.D. or Psy.D. programs in clinical or counseling psychology as well as other subfields in psychology. Others may accept positions in the private sector as science writers, lab technicians, data analysts, marketing researchers, etc.

Students accepted to the M.S. program usually are not provided financial support by the department. Students completing the M.S. terminal program are not ensured acceptance into the Ph.D. program and will be evaluated in comparison with other applicants to the Ph.D. program.

Thirty credit hours of graduate work, which includes a Master's thesis, are required for the M.S. degree. The program will usually be accomplished in two years. The research requirements are identical to those for the regular Master's degree en route to the Ph.D. The General Exam is not required for the MS degree. The coursework requirements follow:

Coursework Requirements

Core Courses (2 courses): Students must take two of the following: Cognitive Psychology (PSYC 403), Social Cognition (PSYC 406), and Developmental Psychology (PSYC 402).

Statistics/Research Methods (2 courses): A two-semester sequence of statistics/research methods (PSYC 421 and PSYC 422). Students complete this sequence in their first year.

Professional Seminar (1 course): This seminar (PSYC 409) covers professional development issues. It is offered for first-year students each fall semester. We occasionally offer a second professional seminar (PSYC 410).

Elective Courses (2 courses): Students must take *at least two additional courses*. These may be either the third core course, or other graduate Psychology seminars, or 300-level advanced psychology seminars. These elective courses must be approved by the student's advisor.

Table 1. Coursework Requirements for M.S. (terminal or not)

	Fall (credits)	Spring (credits)
Year 1	Statistical Analysis 1 (3) Core Course 1 (3) Professional Seminar 1 (1) <i>Research credits: first-year project/paper (2)</i>	Statistical Analysis 2 (3) Core Course 2 (3) <i>Research Credits: first year project/paper (3)</i>
	Credit hrs 9	Credit hrs 9
Year 2	Graduate Seminar 1 (3) (or 300-level course or 3 rd core course) <i>Thesis (3)</i>	Graduate Seminar 2 (3) (or 300-level course) <i>Thesis (3)</i>
	Credit hrs 6	Credit hrs 6

III. Students with Prior Graduate Training

Students who enter the doctoral program with a Master's degree in Psychology from another university, for which they wrote a research-based thesis, can petition the department upon arrival to be exempted from the requirement to obtain a Master's degree at Lehigh (see general procedure for waivers, p. 17). If the department approves the student's research-based thesis as equivalent to our own, the student is not required to complete a Master's thesis in this department. These students can also petition for previous graduate courses to be reviewed for equivalence to departmental courses and accepted in lieu of them. In no case will more than 4 courses be accepted for waiver (see Evaluation and Waivers section below).

Below is a table indicating the timeline for major program research requirements. As noted in the introduction above, success as a scholar will depend on more than simply meeting these basic requirements. Detailed descriptions of each item in the table can be found beneath the table or in the earlier section regarding research requirements for the doctoral program.

Year in Program	Research Activity	
1	Research Apprenticeship	
2 Fall	Independent Scholarly Activity	
Spring	Independent Scholarly Activity	Reading for General Exam
Summer	General Exam	
3	Dissertation	
4		

Students whose research-based thesis was approved by the department will complete the Research Apprenticeship in Year 1, as outlined above. In Year 2, these students will complete the Independent Scholarly Activity rather than the Masters Thesis.

These students will usually complete the General Exam at the end of the summer of Year 2, following the procedures outlined above. However, in rare cases a student may take the General Exam at the end of Year 1 if it is deemed appropriate by their advisor and the Graduate Committee.

Pre-dissertation Project

Students whose research-based thesis was approved by the department as equivalent to our own are required to complete a *pre-dissertation research project* before being allowed to take the general exam. This project should be tailored to each student's individual needs and strengths to provide the best transition to the program and the best preparation for their general exam and dissertation. The general requirements and guidelines are as follows:

- This project is carried out mainly under the supervision of the advisor with consultation and feedback from at least one other faculty member in the department. Thus a committee of at least two members is formed to supervise this project, approve the data plan, and read the final paper resulting from it.
- No formal proposal is required before data collection, but a committee of at least two members is convened to provide feedback and approval of the data collection plan. (It is strongly recommended that at least an area meeting is convened so that the student can communicate their data plan and receive feedback from additional faculty members.)
- The student will present their completed project to the department (in the form of a brown bag) either close to the completion or shortly after they have completed the write-up.
- Copies of the final write-up should be submitted to the committee and to the department.
- Students are strongly encouraged to have this work near completion by the beginning of the second year, because at that point they are to begin working on the Independent Scholarly Activity. See detailed description of this requirement on pages 9-10.

IV. Evaluation and Waivers

Evaluation

Students are reviewed by the faculty at the end of each semester.

- *The major review* of performance in research, coursework, and assistantship assignments occurs every year at the end of the spring semester.
 - In preparation for this review, students must provide a current vita, write a one-page narrative describing how they have built their portfolio over the past year, write a paragraph indicating their plans for the summer, and complete the coursework checklist (see p. 14). All these things should be emailed to the Graduate Director and the primary advisor. Copies of these documents are kept in the student's permanent file.
 - After this review, the Graduate Coordinator provides each student with a written statement of the faculty evaluation of his or her progress in the program. Students are encouraged to discuss these evaluations with their advisors and other relevant faculty members.
- *A secondary review* occurs every year at the end of the fall semester. The purpose of the mid-year review is to identify any concerns early on, or to follow up on any concerns identified in a preceding review, or to deal with any other immediate matters such as recommendations for continuation to the doctorate (see below). Decisions on continuing financial support for the next academic year are also made following the mid-year review.

Continuation to Doctorate

Although all students entering our Ph.D. program are admitted with the expectation that they will complete the doctorate, continuation to doctoral candidacy is contingent on performance. *The faculty specifically addresses the prospects for continuation following the assessment of the General Exam.*⁴

- The Master's Thesis (for students who completed this requirement in our program), General Exam and other performance-related information (e.g., performance during first-year apprenticeship, overall efforts toward portfolio building) are major considerations in this decision. Each student's advisor, in consultation with the thesis committee, makes a recommendation concerning continuation to the graduate committee and the faculty following assessment of the General Exam.

Waivers and Procedure

The description of requirements applies to the usual case of a student entering the program with a Bachelor's degree. However, some requirements may be waived in the case of a student entering with previous graduate training (as previously specified).

A request for waiving of requirements is made in writing by the student, with approval of the advisor, to the Graduate Program Coordinator explaining the reasons for the request. The request will be reviewed by the graduate committee and the decision is subject to approval by the Department faculty.

Please note that a course waiver is not the same as transferring a course from another institution to Lehigh, which must be approved by the Registrar's office. The Registrar will not approve transfer of graduate courses that can already be credited toward a prior graduate degree. In the case of waivers, although the Department may deem that student does not have to take certain courses, the student will still need to complete the same number of credit hours to graduate.

⁴ This deadline may be extended only in case of illness or other emergency.

V. Additional Information and Advice

Graduate Committee

The Graduate Committee oversees the graduate program in conjunction with the Graduate Program Director. The committee consists of one faculty representative from each area, a graduate student representative, and the Chairperson (ex officio). The graduate student representative participates in committee meetings and may be asked to provide input on graduate student opinions. The graduate student representative is not involved in functions such as evaluations, petitions, or reviewing applications of incoming students. The 2013-2014 membership is:

<i>Director:</i>	Almut Hupbach
<i>Social Area:</i>	Valerie Taylor
<i>Cognitive Area:</i>	Nancy Carlisle
<i>Developmental Area:</i>	Deborah Laible
<i>Graduate Student Rep:</i>	Channing Hambric

Communication with Advisors and Committee

Positive and productive relations with the advisor as well as with committee members are an important part of a successful graduate training experience. There are few fixed rules about such matters as frequency of meetings, degree of independence, response time to drafts of papers and proposals, and so on. However, there are also some reasonable mutual expectations. Although advisor availability naturally varies from time to time, students should expect their advisors to be available for regular consultation. Students should normally expect feedback on proposals and writing drafts within one to two weeks (and not exceeding 4 weeks) from advisors and committee members. Faculty are busy people who are juggling numerous obligations, but those obligations include graduate student advancement. Importantly, the likelihood of timely feedback will be higher if the student provides advance notice that an important draft or document is on the way.

Students are obligated to seek and actively respond to the feedback of their advisors on research proposals and thesis documents. Students and advisors should aim to reach agreement on when a draft is ready to be sent to other committee members. Ultimately, however, the student has the final say on when to send a proposal/thesis document to the committee and adviser for evaluation.

Cases of Conflict

In the event of significant advisor-student disagreement (regarding the above or other issues), students and/or advisors should consult with the graduate director or graduate committee. Students should feel free to approach the graduate program director, any member of the graduate committee, other faculty members, or the department chair at any time.

In cases where conflicts cannot be resolved through direct communication, two members of the graduate committee or a member of the graduate committee and the department chair will meet (separately if appropriate) with the advisor and student in an effort to amicably resolve the issue. If a conflict cannot be resolved within the department, outside mediators can be consulted, including the Associate Dean for Research and Graduate Programs in the CAS. Students can also seek advice from the Associate Dean for Graduate Student Life – see contact information below.

Colloquia and Research Brown Bag

Colloquia, sponsored by the Psychology Department are scheduled throughout the academic year. Students are expected to attend all colloquia as part of their training. In addition, the Department holds a weekly Research Brown Bag Seminar coordinated by a graduate student, and each area (social, cognitive, developmental) holds area meetings. Students are expected to attend meetings of their area and Brown Bag talks. Furthermore, students are expected to regularly present at Brown Bag according to the following guidelines:

- *1st year*: students present on their first-year research apprenticeship in the spring semester
- *2nd year*: students present their MS proposal and/or MS work in progress at area meetings in the fall or spring semester (Brown Bag presentation not required)
- *3rd year*: students present their MS thesis in the fall semester
- *4th and 5th year*: students present their research each year, either in the fall or spring semester

Students should not feel limited by these guidelines and are encouraged to present frequently.

Research Funding

Graduate students incur research expenses of varying extent depending on the nature of the projects on which they are engaged. The first step in the search for research funds should be a conversation with the advisor or other relevant faculty. Faculty who have grant money or startup money available that covers the scope of a collaborative project will generally provide support for moderate research expenses of graduate students working with them. If the faculty member does not have funds available, if the project is outside of the advisor relationship, or if the student anticipates needing larger sums of money than the faculty sponsor can provide, the student will need to consider other options.

Students should be sure to check the variety of internal and external funding sources highlighted by the Graduate Life Office: <http://gradlife.web.lehigh.edu/grants>

External Funding

For expenses beyond those that are covered by faculty sponsors and department contributions, there are several national sources for graduate student research funding. If students anticipate substantial expenses, the department strongly encourages students to pursue these funding sources. Applications are generally short; students gain valuable experience in writing a research proposal and budget; and if a student receives a prestigious award, he or she will both have the money for the research and a line that looks impressive on one's vita or resume.

Searching for external funding has never been easier. Here are some tools to help you find funding for general research, Master's theses, dissertations, travel, and so on. Funding ranges from small or specialized grants to large prestigious fellowships such as NSF Graduate Fellowships.

American Psychological Association:

<http://www.apa.org/about/awards/index.aspx>

This APA Scholarships, Grants, and Awards page allows you to search for funding that is especially for graduate students, especially for a certain topic, etc.

American Psychological Foundation:

<http://www.apa.org/apf/funding/scholarships/index.aspx>

This APF Scholarships and Fellowships page has funds for research, travel, and is extremely well laid-out and easy to process.

Association for Psychological Science:

<https://www.psychologicalscience.org/members/grants-awards-and-symposia/student-grant-competition>

This is for student affiliates of APS (you should be one!). It's a searchable database and another incredibly valuable tool.

National Institute of Health (NIH):

<http://grants.nih.gov/training/nrsa.htm>

This page contains information about National Research Service Awards (NRSA).

National Science Foundation (NSF)

<https://www.nsfgrfp.org>

This page contains information about Graduate Research Fellowship Program (GRFP)

Graduate students are limited to only one application to the GRFP, submitted either in the

first year or in the second year of graduate school.

Matching Funds for Graduate Student Grant Proposals. The Psychology Department wants to encourage grant writing efforts by graduate students. We also want to increase students' success rates for obtaining grant funds. Many small grant opportunities state that matching funds from the student's home institution are either "required" or "looked upon favorably." Toward that end, the department will commit up to \$500 in matching funds for such proposals. The amount provided by the department will be equal to whatever amount is provided by some other source at Lehigh (see details below), for a potential total of \$1000 in matching funds. Naturally, the matching funds are provided only if the proposal is funded.

Eligibility criteria:

- The proposal is written by a graduate student in our program.
- The funding description says that matching funds are "required" or "looked upon favorably."
- The student obtains matching funds from some other source at Lehigh. The department will match up to the value provided by this other source (e.g., other source commits \$450, department will commit \$450).
 - One's advisor would normally be expected to be that source.
 - Students have successfully obtained matching fund commitments from the Deputy Provost for Graduate Education.
 - Students are encouraged to do a thorough search for such internal funds. Ask around. The CAS Associate Dean for Graduate Studies should also be approached.
 - If a thorough search yields nothing, please talk to the Department Chair about whether an exception to the general rule is permissible in your case.

Internal Funding

Departmental Funding for Dissertation Research. This funding is to help students carry out high-quality dissertation research, including pilot testing prior to actual data collection. The department will provide up to \$2000 per individual to support the research of graduate students who are conducting dissertation pilot work or who are collecting data for the dissertation per se. Before being eligible for this funding, students must seek external sources of funding (see below).

Eligibility criteria:

- The student has completed the Third-Year Independent Scholarly Activity. The committee meeting for discussion of that work has occurred.
- The student does not have a currently active award from an external funding agency that fully covers his or her research funding needs.
- The student has applied to at least two external funding opportunities for dissertation work (see potential sources above).

To apply for departmental funding, please submit to the Director of Graduate Studies:

- A 1-2 sentence description of your Third-Year Scholarly Activity (e.g., "I wrote a literature review on..."), the date of the committee meeting, and a list of the committee members.
- **One** of the following:
 - Evidence that you have applied for external sources of dissertation funding but were rejected. A rejection email is sufficient.
 - OR: A statement that you successfully obtained external funding for your dissertation but that the funding amount does not cover the amount you need. Provide documentation of the award amount (e.g., a letter congratulating you on the award along with the award amount).
 - In this case, the department will cover the difference between \$2000 and the amount you were awarded (e.g., you got a grant for \$1000, your research expenses will be \$2000 or greater, so the department will add an additional \$1000 to your total).
- A 1-2 page description of the research activities that would be supported by departmental funding. What is the research question? What specific activities would be supported by the

funding (e.g., collecting data on Prolific to pilot test materials; bringing in community members to the lab as participants; etc.)?

- An itemized budget: What amounts of money are needed for each individual research activity that will be carried out? Naturally, the total amount requested will appear here.
- A signature from one's dissertation advisor affirming that: "I have read this proposal. The proposed research activities are important for [*student's*] progress toward completing a high-quality dissertation. I believe that departmental funding for this work is appropriate and justified."

Applications will be reviewed by the Graduate Committee and the Department Chair.

Certificate in Cognitive Science

The Graduate Certificate in Cognitive Science gives students the opportunity to develop expertise in the interdisciplinary study of information processing by human beings as well as by intelligent machines. The Graduate Certificate requires four courses, at least two of them must be at the 400-level. At least three of the four courses must be outside the Psychology Department, and courses must spread at least two departments. (See the University Catalog for additional details.)

Conference Travel Support

Students are strongly encouraged to present their research at regional and national conferences. As with research costs, the first recourse in covering travel costs should be the advisor, who may have travel funds budgeted in a grant. Funds are also available from the Department (up to \$200 for one conference per year), the College (Dean's Office), and the Graduate Student Senate (GSS; see: <http://gradlife.web.lehigh.edu/grants#travelgrants>). The College and Department generally only support trips in which the student is presenting or co-presenting research. The maximum College subsidy is 50% of the cost of the trip. To optimize your support from the Department and College, fill out a College Travel Prediction Form (available in the office) *at least two months* prior to the conference. In all cases, the earlier in the academic year you submit a request the better because money tends to run out. Especially if your conference is late in the year, you should apply even before you know if your paper is accepted.

Teaching Opportunities

Students are encouraged to develop their teaching skills as part of their graduate training. Normally, students begin as teaching assistants. After acquiring a Master's degree, students are qualified to teach independently when opportunities arise. These opportunities most frequently arise in the summer sessions, providing an important component of professional preparation as well as a significant source of supplementary income (the current stipend is around \$4000). You should expect, once you are eligible, that this will typically be your source of summer income.

The summer teaching schedule is organized each fall by a member of the undergraduate committee in consultation with the chair and the undergraduate and graduate coordinators in light of program needs and past enrollment trends. Opportunities for teaching cannot be guaranteed, but the department endeavors to spread such opportunities equitably among qualified and interested students. The following procedures apply.

- A call for summer teaching applications is issued each fall. An application form reviewed and signed by the Advisor and the Graduate Director must be submitted to the department.
- Students must have a Master's thesis in hand to teach independently.
- Summer teaching for graduate students is conceived primarily as a component of professional preparation. Providing teaching experience to qualified students in a timely manner may take precedence over other considerations such as financial need.
- Priority goes to students who are making good progress in the program.

- The summer teaching schedule is reviewed by the graduate committee before it is finalized to ensure consistency with graduate training goals and equity in allocation of teaching opportunities. The schedule is also circulated for comment to all faculty.
- Students should bring any concerns to the attention of the Graduate Committee.

Outside Employment

Students are expected to work full time on their studies as well as teaching or research assignments while they are enrolled in the program. Occasionally teaching or other employment opportunities outside the department arise. The student must consult the Graduate Coordinator and their advisor before accepting such outside employment. By University policy, students receiving full-time support are not normally allowed to accept other employment within the institution. The student needs to petition the Dean of Arts & Sciences for a waiver of this policy.

Career Trajectories

Graduates of our program pursue careers in academic settings (e.g., Postdoctoral Researchers, Assistant Professors, Institutional Research Support) and non-academic settings (e.g., Human Factor Specialists, Statisticians, Research Psychologists at Consulting Firms and Government Agencies). Our program prepares students for both career trajectories, because we train students to become independent scholars with methodological and statistical expertise who can carry out research in a variety of setting and skillfully teach and persuasively communicate knowledge to diverse audiences. Although the applicability of these skills might seem more obvious for careers in academia, they are highly sought-after in industry as well.

Students who are interested in non-academic careers should select their elective coursework to align with their potential career choice (e.g., gain additional statistical expertise by taking courses in Computer Science or Education).

Lehigh's Center for Career and Professional Development provides helpful resources and training opportunities for students interested in non-academic careers:

<https://careercenter.lehigh.edu/content/welcome-graduate-students>

Examples of careers outside of academia and helpful tips on how to prepare yourself for these careers can be found here:

<https://www.psychologicalscience.org/observer/careers-outside-academia-webinar>

<https://www.spsp.org/news-center/announcements/non-academic-job-search-strategies>

VI. Contact Information

Department Coordinator:

Teri Loew: (610) 758-5073, tml6@lehigh.edu

Department Graduate Program Director:

Almut Hupbach: (610) 758-6762, alh309@lehigh.edu

Department of Psychology

Lehigh University

17 Memorial Drive East

Bethlehem, PA 18015-3068

Web: <http://psychology.cas2.lehigh.edu/content/welcome-graduate-program-psychology>

Phone Inquiries: (610) 758-3630

Manager of Graduate Programs, College of Arts and Sciences:

MaryAnn Haller: (610) 758-4280, mh0h@lehigh.edu

Associate Dean, Graduate and Research Programs, College of Arts and Sciences:

R. Michael Burger: (610) 758-4282, rmb206@lehigh.edu

Graduate Student Life:

Web: <http://www.lehigh.edu/gradlife/>

Kathleen Hutnik, Director: (610) 758-4722, kaha@lehigh.edu

Dean's Graduate Student Advisory Council: TBD