}•š}v }oo P ‰ Œšu vš }(

'Œ µ š WŒ}PŒ u /v(}Œu š]

Introduction

t o }u š} }•š}v }oo P [• ‰ Œšu vš }(W•Ç Z}o}PÇX Z Ç Œ šZ

welcome a small, highly select group of outstanding students. We know that you are the next generation

Teaching Assistants, Teaching Fellows, and Research Assistants

The duties of a teaching assistant (TA), teaching fellow (TF), and research assistant (RA) are described below.

By university regulation, full-time graduate students may not work more than 20 hours on the BC payroll. Because we expect students on a teaching assistantship or research assistantship to work 15 hours per week, and because teaching fellowships require substantially more time, our graduate students may not be employed elsewhere in the university.

Teaching Assistants

Teaching assistants (TAs) are expected to work on one or two courses per semester, spending an average of 15 hours per week totaled across all courses. Students are required to attend classes and hold office hours to supplement classroom instruction and explain grading decisions. Some weeks students will need to work more than 15 hours (e.g., when papers or other assignments must be graded), and some weeks students will need to work less.

Specific needs for TA support include the following:

- x Large amounts of grading
- x Significant writing required in a course, which often requires grading by TAs
- x Making up exams
- x Review sessions
- x Break-out or discussion sections
- x Guest lectures
- x Class demonstrations
- x Clerical duties (photocopying, tracking down relevant readings, administrating scantron sheets, etc.)

Not all of the above tasks are relevant to all courses. The level of TA support provided to a course is based on assessment of the overall need.

The course instructor will assign duties to each individual TA as appropriate given the substantive background and skills of the TA and equity across TAs. For example, if a TA has extensive background in the content covered in a course, that TA might present a guest lecture or hold primary responsibility for a review session or a break out section. If a TA has little or no substantive background, he or she might spend a high proportion of time on clerical tasks and would typically not be expected to lecture or run review sessions.

Minimum Requirement

Graduate students with a stipend from grant funding are not required to be a TA. However, to ensure our students receive teaching experience, all students are required to be a TA for at least two semesters during their graduate career.

Special Fellowships

The Graduate Program Director serves on the Graduate Evaluation Committee, which evaluates each

•šµ vš[• ‰Œ}PŒ •• Ç Œo Ç v u l •]•]}v• }µš •‰] o (oo}Á•Z]%

Donald J. White Teaching Award

Second Year Research Project Approval Form (Form 4)

Due March 31: The Second Year Research Project Approval Form must be signed by the members of the Preliminary Advisory Committee.

Master's Degree Option

Due April 1: Students who have completed 30 graduate course credits may obtain a Master's degree. Doing so requires the following forms (with the appropriate signatures).

- x Second Year Research Project Approval Form (Form 4)
- x M.A. Degree Option Form (GSAS form)

External Funding

Students receive funding for five years, whether from Boston College or externally if the student is able to secure external funding for one or more of these years. For example, if a student receives external funding for two years, that student is entitled to three more years of department funding, not five more years. Students may request to stay on for a sixth year, but this is not encouraged and there is no promise of funding for a sixth year. You can view our policy on sixth-year funding in Continuing in the Program.

Students should continually seek external funding for their graduate work. The more research you have done and the clearer your ideas about future research, the greater your chances of getting funding. Try both public and private sources. The secret to success here is persistence. Your advisor will guide you in finding sources and preparing the proposal.

Second Year Research Project

The primary focus of the first and second year is the Second Year Research Project. This project is an empirical study designed in consultation with the advisor. The work must be carried out by the student while in the graduate program at BC. The literature review, design, execution, data analysis, and written presentation should be of publishable quality, although publication depends upon whether a single or multiple-study paper makes the most sense for your topic. A list of possible journals to consider is

You have to take an ethics course administered by the IRB. It is very important that you keep your certificate when you pass, because you will likely be asked to provide proof of course completion for other grants and projects in which you may be involved at a later date.

Final Draft to Committee

The Second Year Research Project must be completed and presented to the Preliminary Advisory Committee by March 15 of Year Two (after the advisor has read and approved that it go forth to the rest of the committee). This will allow time for revisions so that the final approval of the project will occur by March 31.

Defense

A formal presentation and defense of the research is given either to the preliminary advisory committee }Œ š šZ •šµ vš[• Z• Œ Z t}Œ I•Z}‰X /(šZ o šš ŒU šZ •šµ vš •Z } their Preliminary Advisory Committee present. This should occur after the committee has approved the final draft, but before March 31 (for a May graduation date).

Presentation at Graduate Research Day

We encourage students to present their Second Year Research Project at Graduate Research Day (held in the spring of each year).

Flexibility

Additional Courses

The department may ask you to take an additional course if there is a deficiency in your background that is considered to impede graduate training and/or professional success. These requirements will be discussed with you and the Graduate Student Evaluation Committee during your first semester.

Students may take additional courses, either within the department or in other related departments, in consultation with their advisor. Students may elect to take the History of Psychology course, usually taken in year three, during the first two years. Students may take additional electives in the department or in other departments at Boston College, or they may cross-register for courses at universities that form part of the consortium, with special permission of the Graduate Program Director.

Consortium Schools: Boston University, Brandeis University, Tufts University

While students are welcome to take courses beyond those required, your primary professional goal is to conduct research and submit papers for presentation at conferences and publication in appropriate journals.

^šµ vš• vš Œ]vP Á]šZ D •š Œ[• P Œ]v W•Ç Z}o}PÇ

^šµ vš• ‰š]vš} šZ ‰Œ}PŒ u ÁZ} Z À D •š Œ[• ration in W•Ç Z}o}P }µŒ ‰Œ}PŒ uU ÁZ} Z À }u‰o š }µŒ• Á}Œl]v šZ]• Œ U v Z À thesis, are typically accepted as third-year Œ •šµ vš•X ^}u •šµ vš• vš Œ]vP Á]šZ D asked to take one or more of the required course(Œ }µ Ç Œ• }v v šÁ}U ‰ v]vP }v šZ background. These decisions will be made upon admission by the Graduate Student Evaluation }uu]šš]v }v•µoš š]}v Á]šZ šZ •šµ vš[• À]•}ŒX

Continuing On

At the end of the second year, students are either invited to continue on in the program or are asked to

o À U Á]šZ D •š Œ[• P Œ](‰}••] o X dZ]• À oµ š]}v]• • }v š
}šZ Œ Œ • Œ ZU šZ •šµ vš[• Á Œ]š]vPU v ‰ Œ(}Œu v]v Œ ‹µ]Œ

Continuing in the Program

Years Three, Four, and Five

The second period in our graduate program is characterized by a shift to more independent work and an even more intensive focus on research. The third year focuses on two requirements that you work on simultaneously, the Third Year Literature Review and the Dissertation Proposal. The fourth year focuses on dissertation research. Even more than in the first two years, however, meeting the formal

Œ ‹µ]Œ u vš•]• šZ u]v]uµuX dZ •šµ vš[• %Œ]v]% o j}]• ŒŒ Ç]v

Early in the third year, students should meet with their committee to form a tentative plan for Years Three and Four. Students are encouraged to begin pilot research for their dissertation, if they have not already done so, during the first semester of Year Three.

Dissertation Advisory Committee and Dissertation Defense Committee

When you are ready t

Third Year Literature Review

Students identify an area (typically one in which they will carry out their dissertation research) and write a scholarly integrative review of the literature in that area. This paper is not merely the kind used as an introduction to an empirical paper. Nor do we have in mind an old fashioned annotated bibliography that reads like a list of unintegrated summaries. Instead, the third year literature review has the breadth and depth of a scholarly review to be published on its own. The aim is for an article that is a scholarly contribution to the field, providing an integration of the literature, a novel perspective, a tightly reasoned argument, and a firm conclusion. We have in mind the type of paper published in Psychological Bulletin or Psychological Review. Some emphasize integration of empirical studies, others emphasize conceptual issues. Of course, the approach and emphasis are up to you.

Preparation

Students should meet regularly (at least once a week) with their advisor to identify an area, plan their review, and discuss the ongoing work of the review. A good idea is to read a number of review articles in

x

Interdisciplinary Doctoral Program

When departmental doctoral programs are unable to satisfy the interests of the student, an interdisciplinary doctoral program remains a possibility. A student interested in exploring such a possibility should make an inquiry to the Graduate School Office

External Funding

For third- and fourth-year students, there is predoctoral funding available from the APA and NIMH, as well as a wide variety of private foundations. Getting a grant in your third or fourth year will allow you to extend your time in graduate school, do more research, get more publications, and in the end, do better on the job market. (Getting grants looks very good on your CV.)

Policy on Sixth Year Funding for Doctoral Students

Our doctoral students are fully supported for five years, either through grants that they or their advisors receive, or through university funding. Occasionally a student may wish to remain for a sixth year.

When the student is externally funded (directly, or via a faculty grant) or funded by a faculty member's start-µ‰ (µv •U šZ]•   ]•}v]• o (š µ‰ š} šZ •šµ všv šZ •šµ všÁš[• who believe they might require a sixth year are strongly encouraged to seek external support well in advance.

When the student requires university funding for a sixth year, the student must apply to the Graduate Program Director, explaining the need for a sixth year. Their advisor must also write in support of the additional year.

‰‰o] š]}v• Œ µ   Ç : µ o Ç í fth year]. The applications are reviewed and ranked by the Graduate Evaluation Committee. The kinds of criteria to be considered in ranking include whether the student has fulfilled all previous requirements in a timely manner and the number of years of external support that the student has had (taking into account the fact that U6 students are eligible for fewer grants and fellowships). Other criteria may be used as well.

The Graduate Program Director and the Graduate Admissions Director will together determine the number of available university stipends for the coming year, and the total number of students that faculty desire to admit as incoming students. In rare circumstances, a particularly strong case for a sixth year could take priority over admitting a new student. If it is clear that there is an available slot to grant the request for a sixth year, a decision can be made within a month after applications are due.

However, when it is not clear how many university funded slots will be available, a decision must wait µvš]o ‰Œ]o íñ }(šZ •šµ vš[• (](šZ Ç ŒU ÁZv ‰šv• (Œ}uv Á there are unused university funded slots at that time, a sixth year of support may be granted.

Students who apply for a sixth year of university funding that is not granted may appeal to their advisors (}Œ •µ‰‰}Œš šZŒ}µPZ šZ À]•}Œ[• (µv•X

Three-Paper Option

As an alternative to a traditional dissertation, Ph.D. students can compile three first author peer reviewed papers as a dissertation. 8(a 71 RG (e)9(rs a.d3pp)-4(7ld)4(e)] TJ ise9.00000anoaa.d3pp)-4(7ld)4(e)

student chooses the three-paper option, it will require the approval of their dissertation committee, and the student will be required to write scholarly introduction and discussion chapters that consider the three published papers as a related body of research.

Neuroscience Track

Cluster 1: Molecular, cellular, and developmental neuroscience

- x BIOL5510 Cell Biology of the Nervous System
- x BIOL55xx Neurochemical Genetics
- x PSYC5583 Molecular Basis of Learning and Memory
- x PSYC5587 Cellular Perspectives of Motivated Behavior
- x PSYC55xx Introduction to Neurophysiology
- x PSYC55xx Epigenetics and the Development of Behavior

Cluster 2: Systems neuroscience, neuroanatomy, and behavioral neuroscience

- x PSYC5580 Neural Systems and Stress
- x PSYC5581 Neurobiology of Mental Illness
- x PSYC5585 Brain Systems: Motivation and Emotion
- x PSYC5589 Neural Systems and Social Behavior

Cluster 3: Cognitive and affective neuroscience

- x PSYC5571 Controversies in Cognitive Neuroscience
- x PSYC5574 Neuroscience of Sensation and Perception
- x PSYC5575 Advanced Affective Neuroscience
- x PSYC5576 Methods in Human Brain Mapping
- x PSYC5577 The Hippocampus

Statistics Requirement (1 Course)

A firm knowledge of statistics is essential for branches of neuroscience research. Therefore, all students are required to take at least one semester of graduate-level statistics (usually PSYC5501).

Students are strongly encouraged to take additional statistics courses beyond this one-semester requirement. For some lines of research, additional statistics courses may be essential, and students should consult with their advisory committees to determine into which statistics courses they should enroll.

Course Timeline

Ph.D. students typically take 15 credits in the first year, 15 credits in the second year, 4 credits in the third year, and a 1-credit Doctoral Continuation course each semester thereafter.

Year One

PSYC5501 Experimental Design and Statistics

5000-level cluster course

5000-level cluster course

Research Workshop I

Research Workshop II

Professional Development Workshop (0 credits)

Year Two

5000-level cluster course

5000-level cluster course

Research Workshop I

Research Workshop II

Independent Study

Year Three

5000-level cluster course

PSYC9999 Doctoral Continuation (1 credit)

Year Four

PSYC9999 Doctoral Continuation (1 credit)

PSYC9999 Doctoral Continuation (1 credit)

Year Five

PSYC9999 Doctoral Continuation (1 credit)

PSYC9999 Doctoral Continuation (1 credit)

Neuroscience Journal Club/Speaker Series

During every year of their graduate training, students are required to participate in a Neuroscience Journal Club that will include presentations by faculty members, students and outside speakers. These sessions will encourage interaction among the students and faculty conducting neuroscientific research.

Progress Timeline

Guidelines for the first two years of the program are spelled out in Beginning the Program. For the remainder of the program, the different Ph.D. tracks have different deadlines. See the Progress Forms page.

Year Three

Dissertation Committee Form (Form 10)
Due May 15

Cumulative Student Progress Form (Form 1)
Due May 15: Students submit the Cumulative Student Progress Form each year. Save this form and update it whenever a requirement is completed.

Year Four

Dissertation Proposal Defense Approval Form (Form 7)
Due December 1

Ph.D. Thesis Forms
If you are finishing your Ph.D. in four years, the approval forms are due April 1. Students who successfully defend by early April can march in the May commencement.

Cumulative Student Progress Form (Form 1)
Due May 15: Students submit the Cumulative Student Progress Form each year. Save this form and update it whenever a requirement is completed.

Year Five

Ph.D. Thesis Forms
Due April 1. Students who successfully defend by early April can march in the May commencement.

Cumulative Student Progress Form (Form 1)
Due May 15: Students submit the Cumulative Student Progress Form each year. Save this form and update it whenever a requirement is completed.

Quantitative Track

Quantitative psychology is a core area of psychology that studies methodological issues that arise in conducting research in social and behavioral sciences. The methodological issues include research design, development and application of statistical methods for data analysis, psychometrics, and mathematical modeling of psychological processes.

The graduate program in the Quantitative concentration offers research training in quantitative methodology. The primary goal of the program is to train students to become quantitative psychologists who have their own line of research in quantitative methodology.

Psychology Faculty Affiliated with the Program

- x   Hiram Brownell
- x   John Christianson
- x   Sean MacEvoy
- x   Ehri Ryu
- x   Scott Slotnick
- x   Hao Wu

Courses in Quantitative Methods

PSYC5501 Experimental Design & Statistics

This course focuses on experimental design and related statistical methods. It covers between-subject, within-subject, and mixed designs with one and two factors. Statistical topics include the relevant statistical model and model assumptions, omnibus test, test of contrasts, multiple comparison, effect size, and power calculations. One and two sample t tests will also be revisited.

PSYC5502 Multiple Regression

This course is devoted to the study of multiple regression as a general framework for assessing the relationship of a dependent variable with a set of independent variables. The course covers the following topics: regression with a single predictor, multiple regression with two or more predictors, regression with a categorical predictor, multiple regression with interaction. If time allows, the course

PSYC6602 Analysis with Missing Data

This course is to provide an introduction to the theory and application of analytic strategies for analyzing data with missing values. This course is designed as an advanced level graduate level course. It is assumed that students are familiar with multiple regression and structural equation modeling, and are able to conduct analysis using these techniques on their own. The following topics are covered: missing data mechanisms, traditional methods for dealing with missing data, maximum likelihood method, maximum likelihood with auxiliary variables, and multiple imputation. Mplus and SAS are used as primary software packages. R packages will be introduced for multiple imputation starting Fall 2018.

PSYC6605 Introduction to Multivariate Statistical Methods

Topics covered in this class include: Matrix algebra and basic concepts in multivariate statistics; Exploratory factor analysis of continuous, dichotomous and ordered categorical data with analytic rotation; Principle component analysis; Discriminant analysis; Correspondence analysis; Clustering; Multidimensional scaling. SPSS and R will be the main computational tool. Students should have taken a graduate level linear regression class before enrolling this class. Starting AY 18, R will be used along with SPSS.

PSYC#### Nonparametric Statistics

It is likely that a graduate level course in nonparametric statistics will be offered starting AY 18-19.

Course Requirements

Nine courses are required as outlined below, which is more than the six required for the other concentrations. The

- x PSYC6602 Analysis with Missing Data
- x PSYC6605 Introduction to Multivariate Statistical Methods
- x PSYC66xx Bayesian Statistical Methods
- x SOCY7704 Regression Models for Categorical Data
- x SOCY7705 Advanced Statistics
- x SOCY7706 Longitudinal Data Analysis
- x SOCY7708 Hierarchical Linear Modeling
- x SOCY7709 Quantitative Data Management
- x SCWK9951 Survey of Research Methods in Social and Behavioral Research
- x SCWK9953 Cross-Cultural Issues in Social and Behavioral Research
- x SCWK9962 Multilevel and Longitudinal Data Analysis

One Breadth Course

Year Three
Complete all course requirements.

} u ‰ o š   D • š Œ [• Œ •   Œ Z ‰ Œ } i   š X

Students are encouraged to present research at a national conference.

Continue independent research.

Select a topic for literature review.

March 15
Near ( ] v o   Œ (š } (D • š Œ [• Œ •   Œ Z ‰ Œ } i š š} } u u] š š   Á] š Z   À] • } Œ

/ u ‰ } Œ š v š W š š Z   v } (š Z š Z] Œ Ç Œ } Œ š Z   } u ‰ o š] } v } (D • š Œ
invited to continue on in the program. Those not invited to continue will, if possible, leave with a
 D • š Œ [• P Œ X d Z À o µ š] } v] • • } v š Z D • š Œ [• Œ •   Œ Z ‰ Œ
writing, and performance in required courses.

Year Four
Write a literature review.

Continue independent research.

Formalize Dissertation Committee.

Write dissertation proposal.

March 1
Dissertation proposal due to committee

May 15
Students are passed into Doctoral Candidacy when they have successfully defended the dissertation proposal.

Year Five
Work on dissertation, which should be successfully defended by June.

Students who successfully defend by early April can walk in the May commencement.

Progress Evaluation

There are two important kinds of evaluations, by oneself and by the department.

Self-Evaluation

How am I doing? Every student asks this question, and of course the answer depends on individual goals. Here are some benchmarks. By the end of August of your:

First Year: You have attended a professional conference. You are hard at work at your research. Your advisor is now your collaborator. You have done well in classes.

Second Year: You have presented a paper/poster at a professional conference. You have submitted a ‰ ‰ Œ š } i } µ Œ v o X z } µ [Å Œ] À D • š Œ [• P Œ X

Third Year: You have now presented a second poster at a conference, published a journal article and submitted two more, one based on your literature review and another on your research.

Fourth Year: You have now presented a third poster and have published two journal articles. Your

šÁ v šZ •šµ vš[• À}oÀ]vP]vš Œ •š• v Œas tGEoffer. ThZs v ÁZ š }µ Œ secondyear evaluation is a good time to assess that fit.

Unsatisfied Requirements

When, for good reason, a program requirement is unsatisfied at the time of the end of year evaluation, the Evaluation Committee may notify the student that he or she will be allowed one additional semester to complete the unsatisfied requirement, provided the committee deems that the student has the potential to complete the requirement. If the requirement is not fulfilled by the end of the additional semest ŒU šZ À oµ š]}v }uu]šš u Ç] š} •µ•‰ v šZ •šµ vš[• Œ •µ•‰ v šZ •šµ vš[• (]v v] o •µ‰‰}ŒšU }Œ •l šZ •šµ vš š} o À

Advisor-Student Relationships

What to Expect

 d Z   I   Ç   ‰   Œ • } v   ] v   š Z   • š µ   v š [•   µ   š] } v   ] •   š Z   À] • } Œ X   / v   } µ Œ   ‰   Œ
the student, providing much of the training through close collaboration. This training includes guiding the student in setting up a research program and in collecting, maintaining, analyzing, interpreting, and publishing data. The advisor provides the student with most of the specific information and resources needed to become an independent researcher.

Experience and research have demonstrated that the nature of supervision and the quality of communication between graduate students and their advisors are critical elements affecting graduate education. The quality of the dissertation and of the educational experience is enhanced, completion rates are increased, and time in the program are reduced when graduate students and their advisors work closely and effectively together. The guidelines here are necessarily broad, merely suggesting underlying principles and basic procedures that can enhance academic quality, safeguard student welfare, and expedite progress towards satisfactory completion of degree requirements.

The principal role of the advisor is to help the student achieve his or her scholarly potential. The student has a right to expect commitment, accessibility, professionalism, stimulation, guidance, respect, and consistent encouragement from the advisor. In turn, the advisor also has a right to expect commitment, professionalism, and respect from the student. The advisor should be available to help at every stage, from formulation of research projects through establishing the methods and discussing the results, to

x   Select and plan a suitable and manageable research topic for the student to pursue

x   Establish (with input from the student and colleagues) a preliminary advisory committee, and convene a meeting, normally at least annually, to discuss the student's progress. When there is a conflict in advice or when there are different expectations on the part of members of the advisory committee, the advisor and student are expected to endeavor to achieve consensus and resolve the differences in perspectives.

x   Keep each other informed of matters (such as leaves or vacations) that may affect the joint work in the student's progress. They should also work together so the student's progression in the work will continue when the advisor will be out of office for extended longer.

x   Maintain awareness of and share information about current program requirements, deadlines, sources of funding, etc.

x   Acknowledge appropriately their respective contributions in presentations and in published

Time-Related Problems

Students are expected to fulfill their requirements, write their second year Research Project, third year Literature Review, Dissertation Proposal, and Dissertation, as well as other research write-ups in a timely manner. Nevertheless, circumstances can arise that produce delays. Conflicts with advisors and the Student Evaluation Committee can be minimized by bringing these circumstances to their attention ahead of time.

Faculty are expected to return student work in a timely manner as well, with three weeks being the longest amount of time a student should normally have to wait for feedback, provided the student has submitted the work at the appropriate time. The best tactic here is to make arrangements with your advisor ahead of time.

Problems as TA or TF

Any problems you encounter in your role as TA or TF can be brought to one of the committee members or the Graduate Program Director.

Bring Your Concern to Graduate Program Committee

The Graduate Program Committee discusses issues and problems which students and faculty might have relating to the graduate program. Issues concerning the graduate program are discussed by the Graduate Program Committee before being formally voted upon by the faculty. Topics may be proposed by any faculty or graduate student, so feel free to bring your concern to either the Graduate Program Director or to any member of the Graduate Program Committee. The Graduate Program Committee makes recommendations to the department chair and faculty with the goal of promoting academic coherence and excellence of the progra9 0 1 70r2(co)-6(h)14(erenc(ics)-4(o)1- 1 0