To: The Department of Psychology, The Office of the Dean of the Graduate School, The Office of the Dean of the Faculty, and The Office of the Provost

From: Lauren Feldman (G4 Psychology and Vice President of Graduate Student Government), Psychology Graduate Students, and the Graduate Student Government

Re: The Psychology Department’s Graduate Funding Model

Princeton University’s Department of Psychology is widely recognized as one of the top programs in the nation. Faculty, postdoctoral fellows, and graduate students conduct cutting-edge, interdisciplinary, and high-impact research across the fields of cognitive, developmental, and social psychology, publishing in top scientific journals. As with all PhD programs at Princeton, Psychology graduate students are fully funded for the duration of the regular program through first year fellowships, outside fellowships (e.g. NSF, NDSEG), Assistantships in Research (ARs), and Assistantships in Instruction (AIs). Beginning in 2018, with support from the Graduate School and the Provost, the Psychology department made several changes to the teaching requirements for students without outside funding, significantly improving their ability to conduct high-quality research and make satisfactory progress towards graduating within the regular program length.

In this white paper, we propose further improvements to the Psychology department’s teaching and funding model, bringing the department further in line with peer departments at Princeton and psychology departments at peer institutions. In brief, we provide quantitative evidence that graduate students without outside funding are tasked with an unmanageable teaching load that is 2-4 times those of our peers. We argue that the teaching burden arises from lower access to federal grant funding. To address this issue, we propose (1) restructuring the Psychology department’s funding model to be similar to that of the social sciences and humanities, funding students through fellowships from the Office of the Provost, and (2) setting a departmental teaching requirement of 12 precept hours over the regular program length for all students. Notably, this new funding model would likely not meaningfully change the financial cost to the University, would significantly alleviate excessive and inequitable teaching loads, and would meet the department’s AI needs for undergraduate courses.

Psychology students teach substantially more than students at peer institutions, and in peer departments at Princeton. Under the current funding model, Princeton Psychology graduate students are funded with a combination of first year fellowships, outside fellowships, AR-ships, and AI-ships. As of 2018, all graduate students are required to teach a minimum of 9 precept hours (or 3 half-loads, i.e., 3 sections of 15 students each, for three semesters). However, if a student does not have a funded fellowship or funding support from an advisor’s research grant, students must teach 24 precept hours over the course of the 5-year degree (6 precepts, or 90 students per year, in years G2-G5).
As a result of this funding model, graduate students without outside funding in
Princeton Psychology have teaching loads 2 to 3 times higher than the Psychology
departments at our closest peer institutions (Harvard and Yale). All psychology graduate
students at Harvard and Yale teach 4 semesters1 over the whole degree, regardless of funding
status. Even within the Princeton community, graduate students without outside funding in
Princeton Psychology have teaching loads 2.7 to 4 times higher than other Princeton
departments that are comparable to ours in the nature of research conducted (e.g.,
Princeton Sociology, Politics, and Neuroscience2). It is unreasonable for there to be such
intra-University teaching load inequity for graduate students who do extremely similar work.

Consequently, Princeton Psychology graduate students are not able to spend as much
of their time on research as graduate students in Psychology at peer institutions, or indeed even
as much as fellow graduate students at Princeton itself. Our inability to make as much research
progress as those students makes us less able to compete with them (on the academic job
market, as well as for awards), and it likely makes our department less appealing to competitive
graduate applicants who are choosing among programs that offer their graduate students
substantially more time for research.

Princeton Psychology graduate students report that the current teaching load is
excessive (quantitative survey data), inequitable, unmanageable, and negatively impacts
their research productivity, career options, overall well-being, and ability to teach
effectively (qualitative graduate student testimonials, Appendix B). Even after the recent
2018 initiative that reduced the maximum Psychology teaching load from 39 to 24 precept hours
over the regular program length, graduate students who teach the full load remain highly
dissatisfied, according to a November 2019 department survey. Over 50% of G2s-G5s reported
they have no source of outside funding or only one year of outside funding after the their first
year3 (Figure 1).

Students were asked to rate their satisfaction with the teaching load on a continuous
scale of 1-7, with 1 indicating “the load is too low,” 4 indicating the midpoint, and 7 indicating

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1 While Harvard and Yale Psychology both have variable teaching expectations depending on the course,
in general their teaching load in any given semester is substantially lighter than Princeton Psychology’s.
Harvard Psychology generally has their graduate students lead 2 sections for each semester that they
teach (and since they teach for 4 semesters, this totals 8 sections led over the course of the degree. This
is one-third as high as unfunded Princeton Psychology’s load of 24 sections led over the degree). Yale
Psychology has its graduate students lead no more (and often less) than 3 sections in a semester when
they are teaching (and since they teach for 4 semesters, this is a maximum of 12 sections led over the
whole degree—half as many as Princeton Psychology).

2 Princeton Sociology (which conducts research comparable to social psychology) has its graduate
students teach 6 precept hours over the whole degree. Princeton Politics (which conducts research
comparable to psychology on the social and cognitive border) has its graduate students teach 9 precept
hours over the whole degree, or requires graduate students to be available for 4 semesters of teaching
(whichever comes first). Princeton Neuroscience (which conducts research comparable to research on
the cognitive psychology-neuroscience border) has its graduate students teach 6 precept hours over the
whole degree. These loads are ~half to one-fourth as high as unfunded Psychology students’.

3 In November 2019, the DGS representatives surveyed all 49 graduate students in the department. Thirty
students completed the survey, but the 10 G1s were excluded from this analysis as G1s do not teach.
The raw data on teaching presented in this document can be viewed here.
“the load is too high.” Students without outside funding reported significant dissatisfaction with the teaching load (mean rating = 5.787), with 7 (the end of the scale) being the most frequently endorsed rating (Figure 2). There is a near unanimous consensus in this group that the teaching load is too high (87.5% of unfunded students report that the teaching load is excessive). Indeed, this pattern extends to those with only one year of expected funding (mean rating = 5.33). It is notable that, on the average, no surveyed group reported that teaching opportunities were insufficient, even those with the highest levels of outside funding.

**Figure 1.** Here, “Years of Outside Funding Expected” (on the x-axis) refers to the total number of years of outside funding the student has received after G1. A 0 on the x-axis indicates that the student does not have a fellowship/outside funding; a 1 indicates that the student is funded for 1 year in the program. The y-axis shows the number of students who reported that amount of outside funding, out of a total n = 20.
Figure 2. Students were asked the following question: “Are you satisfied with your teaching load (TA/Al requirements and expectations)?” on a continuous 1-7 scale, with 1 indicating “the load is too low,” 4 indicating the midpoint (neither too low nor too high), and 7 indicating “the load is too high.” Students with 0-1 years of outside funding report high dissatisfaction with the teaching load (i.e., that it is excessive).

See Appendix B for qualitative testimonials from Psychology graduate students about how their teaching loads have affected their research productivity, career prospects, ability to effectively teach undergraduates, overall well-being and experience in graduate school, and the departmental climate.

To address these problems, we propose moving Psychology graduate students off of the AR/Al funding model, and onto the fellowship model that all graduate students in the social sciences and humanities are on. We propose that the department set a departmental teaching requirement at 12 precept hours over the whole degree. This model would make Psychology’s teaching load much more manageable and equitable, would allow our department to be more competitive with peer institutions, would not cost Princeton University more money, and would still allow the department to staff all the precepts/Al sections that are necessary.

The current funding structure is inappropriate for the Psychology department, because Psychology has lower access to federal grants. Princeton’s graduate funding model expects graduate students in the natural sciences to be supported by their advisors’ large research grants; if a student’s advisor does not have a grant, that student would be expected to teach for their funding. This rarely happens in the natural sciences broadly, but it happens often in Psychology, as many Psychology graduate students and faculty do not receive large research grants. As a field, Psychology receives a comparable amount of federal grant money as
other social sciences, but much less federal grant money than natural sciences. Therefore, it is unreasonable to expect Psychology to be able to support graduate students on external research grants at the same level that other natural science departments do.

![Federal Research Funding by Field and Fiscal Year](image)

**Figure 3.** “How much federal funding is directed to research in psychology?” From the American Psychological Association. Source: [https://www.apa.org/monitor/2017/04/d datapoint](https://www.apa.org/monitor/2017/04/d datapoint)

**Proposal 1: Change Psychology’s graduate funding model to the fellowship model.**

The funding model for Psychology graduate students should be structured the same way that the social sciences and humanities are structured: graduate students in the social sciences and humanities are on full fellowship support for their entire time in the program, and their funding is not dependent on their teaching. This funding model is the most appropriate model for Psychology, because Psychology as a field receives an amount of federal grant funding comparable to the social sciences. Moreover, changing Psychology’s funding model to the fellowship model would likely not involve a meaningful increase in cost to Princeton University. Assistant-in-Instruction funds come from the Office of the Dean of the Faculty (DOF), while

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4 Moreover, the federal agency that contributes the most funding to psychology research (at 89.5%) is the National Institutes of Health. The sub-area of psychology that is most closely in line with NIH is clinical/mental health and psychiatry; however, clinical psychology is a sub-area that is not present in Princeton Psychology (which has social, cognitive, developmental, and neuroscience areas, but not clinical). Thus, given that the Psychology average in this figure is likely inflated by clinical-leaning grants, the relevant amount (of non-clinical psychology grants) would be lower—substantially lower than the natural sciences, and on par with the other social sciences.
fellowship funds come from the Office of the Provost. The same money that currently funds graduate students through AI positions should be released by the DOF, returned to the central University fund, and transferred to the Office of the Provost to be distributed to graduate students as fellowships, ensuring that each semester’s funding would not be conditional on teaching in that particular semester. This model would not require that more money be set aside to fund graduate students; rather, the funding would simply come from a different stream.

Note that under the fellowship funding model, faculty and graduate students are still incentivized to apply for outside grants and fellowships. For faculty, obtaining research grants is essential for tenure and promotion, and funds necessary research expenses (e.g., human subject payments and equipment) as well as research staff (research assistants, lab managers, and postdocs). For graduate students, outside fellowships remain prestigious, advantageous for academic and industry job markets, and often provide income at higher rates than standard stipend packages. Indeed, faculty and graduate students in departments and institutions with a fellowship funding model (e.g., Princeton Sociology and Politics; Harvard and Yale Psychology) do apply for and receive outside funding and fellowships at high rates. Princeton Psychology’s incentives to apply for outside grants and funding would thus be identical to the incentives of departments comparable to ours.

Proposal 2: Institute a department-wide teaching load of 12 precept hours over the regular program length.

If Psychology instituted a department-wide teaching load of 12 precept hours over the whole degree (an increase in the minimum from 9 to 12, and a decrease of the maximum from 24 to 12), the department would still be able to staff all the precepts that it needs to. This estimate is in fact conservative, as it assumes for simplicity that DCE students would not teach at all and therefore would not contribute to the number of yearly AI hours taught (currently, Psychology DCE students teach 12 precept hours, i.e. a 6/6 load during their DCE year—a load that likely competes with their goal of making progress on their dissertations, which is the principal aim of a DCE year).

Enrollment numbers for all Psychology course offerings for the past three years were reviewed from listings on the Registrar’s website (see Appendix A). Based on this review, the Psychology department requires approximately 108 precept hours per year. Given current enrollment trends (see also Appendix A), 12 precept hours per graduate student over the course of the regular program length (3 precept hours in years G2-G5, i.e. half of the current requirement for graduate students without outside funding) would be sufficient to meet the departmental need for precept hours. Indeed, in Spring 2019-20, the number of graduate students needing Alships for funding far exceeded the number of preceptors needed for course offerings. As a result, the maximum enrollment for courses was increased to create a need for additional preceptors—despite the fact that many of the graduate students who taught that semester (i.e., graduate students for whom unnecessary additional labor was created) had already taught more precept hours than the departmental requirement.

Finally, 12 precept hours over the regular program length would bring Princeton’s Psychology department in line with norms established by peer institutions, as well as other Princeton departments. This teaching load would thus provide important and valuable teaching
experience to all Psychology graduate students, while also enabling them to devote the majority of their time to research.
Appendix A: The Proposed Teaching Load Would Sufficiently Staff Undergraduate Courses.

Courses Offered in Spring and their Estimated Enrollments
Main Lecture Classes:
  ● *Intro to Cognitive Neuroscience, 135\(^5\)
  ● Psychopathology, 90
  ● Quantitative Methods, 45
  ● Social Psychology, 180
  ● Health Psychology, 65
Total: 515 students enrolled / 15 per precept = 34.33 precepts

Elective Classes:
  ● 1 to 4 mid-sized AI classes, 45-90 students. (Classes like: Close Relationships, Prejudice, Judgment and Decision Making, Sensation and Perception, Psychology of Language, Computational Models of Cognition)
On average: 2.5 x 67.5 = 168.75 / 15 = 11.25 precepts

Seminars:
  ● ~4-8 seminars, no AIs needed (~20-40 students)

Courses Offered in Fall and their Estimated Enrollments
Main Lecture Classes:
  ● *Functional Neuroscience, 135
  ● *Fundamentals of Neuroscience, 135
  ● Introduction to Psychology, 90
  ● Developmental Psychology, 270
  ● Cognitive Psychology, 90
  ● Research Methods, 45
Total: 765 students enrolled / 15 per precept = 51 precepts

Elective Classes:
  ● 1 to 4 mid-sized AI classes (45-90 students)
On average (see above): 11.25 precepts

Seminars:
  ● ~4-8 seminars, no AIs needed (~20-40 students)

TOTAL # OF PRECEPTS THAT NEED TO BE TAUGHT PER YEAR: 107.83

\(^5\) Asterisks indicate classes that are cross-listed with Neuroscience; grad students in the Princeton Neuroscience Institute (PNI) will likely also be teaching these courses (lessening the load for Psych grad students). Indeed, Psych graduate students may not be permitted to AI for Functional Neuroscience or Fundamentals of Neuroscience, as priority for those classes goes to graduate AIs in PNI.
Current Numbers of Psychology Graduate Students by Year:

- 1st year: 7
- 2nd year: 10
- 3rd year: 4
- 4th year: 14
- 5th year: 9
- DCE: 5

Excluding DCE, there are about 9 graduate students per cohort.\(^6\)

If each graduate student teaches 12 precept hours over the whole degree (3 precept hours in year 2, 3, 4, and 5), and there are an average of 9 grads per cohort/year, then:

**9 grads x 4 years x 3 precept hours = 108 precept hours that graduate students would be teaching every year. This is about equal to the number of precepts that need to be taught each year.**\(^7\)\(^8\)

\(^6\) This current plan assumes that DCE students are not teaching at all. Currently, DCE students are expected to teach a 6/6. This is extremely high, and makes them less able to make progress on their dissertations (which is the principal goal of taking a DCE year). DCE students should be able to primarily focus on their dissertations, which is why the current proposed plan gives them teaching relief. However, if DCE students were instead assigned a 0/3, or even a 3/3, that would be much more reasonable than their current load of 6/6, and would potentially lower the load for grad students in years 2-5 as well.

\(^7\) For simplicity, we didn’t take into account head AIs (who typically teach 1 fewer precept section, but take on administrative tasks for the course). Given that we expect this breakdown to be a “baseline” or a starting point, we’d expect the department to be able to resolve these nuances alongside factors like enrollment in any given year.

\(^8\) For simplicity, we also didn’t account for lab sections (versus precept sections) -- we essentially treated all sections as precept sections rather than lab sections. Again, given that we expect this breakdown to be a “baseline” or a starting point, we believe that the department would be able to resolve these nuances alongside factors like enrollment in any given year.