Teaching and Funding FAQs

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What are the various assignments available to supported grad students?

- **Standard TA:** Conduct quiz sections twice a week for two sections of a calculus or precalculus course.
- **Other TA jobs:** Assist in and out of the classroom with courses such as Math 411/2 and 444/5.
- **Teaching your own section:** Take responsibility for your own section of a course.
- **Grading:** Grade papers for a 400-level or beginning 500-level course. Depending on the instructor, you may also be asked to hold office hours and/or conduct problem sessions.
- **TA Mentor:** Teach only one quiz section twice a week, and serve as advisor and mentor for approximately five new TAs.
- **Lead TA:** Help to plan and conduct TA training, supervise TAs, and deal with problems as they arise.
- **Computer Assistant:** Provide computing help to grad students, staff, and faculty; and work with the computing staff to write, test, debug, or install software and Web pages.
- **Research Assistant:** Work with your advisor on research.

Sometimes there will be additional options during a given quarter. These will be announced when the TA preference sheets are
passed out. Note that beginning TAs are always assigned to standard TA jobs during their first quarter (except international TAs who have not yet passed the spoken English test–such students are assigned to grading jobs that do not involve working directly with students).

What is TA training?

It is a Math Department training program conducted each September during the week before Autumn quarter classes start, required for everyone who will be employed as a TA in the Math Department. In addition to providing practice in basic teaching techniques, it introduces essential information about the content and structure of calculus and precalculus courses at UW. Most training sessions are organized in “mentor groups” of new TAs all assigned to the same course and led by an experienced TA mentor. The mentor meets and talks with and observes the new TAs throughout their first quarter in the classroom.

I have previous teaching or TA experience. Do I have to go through the Math Department's TA training?

Yes, primarily because the departmental TA training includes a great deal of material that is specifically oriented toward teaching math courses at UW. Moreover, some of the discussions of teaching techniques are even more helpful to someone who has some previous experience to build on.

I took TA training when I first came to UW a year ago, but I did not have a classroom TA job last year. Am I done with TA training?

No, you are required to attend most of TA training again. TA training is so concentrated that without an immediate opportunity to apply the new knowledge, much of it quite naturally slips away. Some parts of the training are revised every year. Working with your mentor group during TA training establishes lines of communication that you can draw on during the quarter. If you would like to consider skipping some sessions, talk with the TA coordinator about which ones you might be able to omit without too much loss.

How are Math TA positions awarded?

People hired as TAs in the Math Department generally fall into three categories. How the positions are awarded depends on the category.

- **Current Math grad students**: People in this category are generally awarded teaching assistantships as part of an offer of admission and financial support. If you were admitted without support and would like to be considered for a TAship, see Can I apply to become fully supported?

- **Current Applied Math grad students**: Each year, the Math Department hires a certain number of grad student from the Applied Math department as TAs. These jobs are awarded by the Applied Math Department as part of an offer of admission and financial support. If you are in AMath and would like to be considered for a Math TA job, contact your Graduate Program Coordinator.

How are Math TA job assignments made?

Math TA jobs are assigned each quarter. If you are a new TA, you will probably be assigned at random to a standard TA job. Thereafter, each quarter you will be given an opportunity to express your preferences among the list of available TA jobs. The department makes every effort to assign as many people their first choice jobs as practical. Although it is never possible to give everyone their first choice, most TAs end up getting one of their first three choices.
What time will I be assigned to teach?

Most TA assignments involve teaching for two consecutive class hours on Tuesdays and Thursdays, starting at 8:30 or later and ending no later than 3:50 (e.g., 8:30-10:20 or 1:30-3:50). You'll be given an opportunity each quarter to tell us your time preferences and times you are not available. If you are expecting a standard TA job, be sure to let the Director of Math Student Services (543-6830) know of all potential time conflicts on Tuesdays and Thursdays, especially if you are taking courses outside the Math department. Do this even after you have your TA assignment, because sometimes we need to make last-minute changes in assignments.

How are TA mentors chosen?

Each spring, students who will be returning in the fall are invited to volunteer to be TA mentors when they fill out their TA preference forms. The mentors are chosen from among those volunteering by the TA Coordinator, in consultation with the Graduate Program Coordinator. The main criteria are teaching effectiveness and communication skills.

How is the Lead TA chosen?

Each year, the TA Coordinator invites an outstanding experienced TA to consider being Lead TA the following year. Often the new Lead TA starts in the position in winter or spring, when the duties are light and the Lead TA and TA Coordinator can start planning for fall. It is helpful (though not absolutely required) for the Lead TA to have experience as a TA mentor. If you are interested in being considered for the job, by all means let the TA Coordinator know.

What are quiz sections?

Most undergraduate courses at the precalculus or calculus level (namely $111/2, 120, \text{ and } 124/5/6$) meet five times a week: On Mondays, Wednesdays, and Fridays, the faculty member in charge of the course lectures, usually to groups of 80-160 students; and on Tuesdays and Thursdays the TA leads quiz sections, usually in groups of 25-40 students. Typically, no new material is presented in quiz sections. Instead, they are a time for discussing homework problems, giving quizzes, answering questions, doing examples in front of the class, and having the class do worksheets. Faculty members vary in the extent to which they “script” their quiz sections--some TAs are given quite a lot of freedom to develop their own examples and worksheets, while others are given very explicit instructions about what to do in section.

How many hours per week does a TA job require?

TAs are officially employed at 50% of full-time, which means 20 hours per week on average. TAs who teach their own sections of courses can sometimes find themselves working more than 20 hours per week, especially during the first quarter in which they teach a given course. On the other hand, some TA jobs will take less time if the TA is thoroughly acquainted with the material and/or has had the same assignment before. For more information about typical workloads for specific TA jobs, contact the Student Services Office (Padelford C-36, grads@math.washington.edu, 206-543-6830).

I'm interested in teaching my own class. How likely is it that I will be able to do so?

We try to give all PhD students several opportunities to teach their own sections, if they are interested in doing so, after they have passed prelims. In addition, particularly strong Master's students in their final year are sometimes offered the opportunity to teach their own section of a course, especially if they have an interest in teaching as a likely career path.
What courses are available for grad students to teach?

- **Evening sections:** Each quarter, one or two TAs are assigned to teach evening sections of calculus or precalculus classes (111, 112, 120, 124, 125, 126). These classes meet with the instructor two or three evenings a week, for a total of approximately 4 hours, in sections of about 40 students each. There are no quiz sections.
- **Intermediate courses:** Several TAs are assigned to teach their own sections of the sophomore-level courses 307, 308, 309, and 324. These meet with the instructor MWF for 50 minutes, with no quiz sections.
- **Small precalculus/calculus lectures:** If the standard precalculus or calculus lectures (111, 112, 120, 124, 125, 126) become overloaded, we sometimes assign one or more experienced grad students to lecture to classes of 40 students MWF. These classes meet in quiz sections with another TA on Tuesdays and Thursdays.

What is Math 597, and who is required to take it?

Math 597, **Seminar on Teaching Math**, is a one-credit “teaching internship.” It pairs graduate students who are new at teaching their own sections with experienced faculty advisors, usually teaching the same course at the same time. The first time you teach your own section of a course at the 100-level, and the first time you teach your own section of a course at the 300-level, you must register for Math 597.

What are the various TA and RA salary levels?

See the section on “promotions” in **Guidelines for TA and RA appointments**, and the **Graduate School’s salary page**, in particular the **Regular (Non-variable) TA/RA/SA Salary Schedule**. Math grad students are typically paid under Schedule #1.

I was admitted without full financial support. Can I apply to become fully supported?

Yes. Each spring, all students who are not fully supported by the department are given an opportunity to apply for supported status. The application deadline is the end of the second week of the Spring quarter. To apply, submit the following to the Student Services Office, Padelford C36:

- A completed **Application for Change of Status in Mathematics**;
- A **Statement of Educational and Professional Objectives**;
- Three letters of recommendation from faculty members in the UW Mathematics Department.

At least two of the letters must be from instructors of mathematics courses you have taken for graded graduate credit at UW. If you have been employed as a Teaching Assistant in the Math Department, the third letter should be from a faculty member who supervised your work as a TA; otherwise, it should be from a third course instructor. Forms can be obtained in the Student Services Office (grads@math.washington.edu, 206-543-6830). *(Note that there are different forms for academic recommendations and teaching recommendations).* It is not necessary to submit transcripts or to pay an application fee.

How are decisions made about renewal of financial support?

Every Spring, the Graduate Program Committee meets to evaluate the records of all supported students, and decide whether to renew the support of each one. The primary criteria for renewal are “normal progress” and TA performance: If your TA performance has been satisfactory and you are meeting the criteria for normal progress for PhD or Master’s students, as appropriate, then your support will be automatically renewed for the number of years specified in your original offer (usually 5 years for PhD students and 2 years for Master’s students). Master’s students are generally not supported beyond 2 years, but PhD students may be supported for longer than 5 years on a year-by-year basis provided they continue to make progress.
toward completing a dissertation. If you are not making normal progress, then your case will be evaluated individually to decide whether your support will be renewed. The committee will take into consideration all the information it has available: course grades, performance on prelims, evaluations from faculty who have worked with you, evaluations of your TA performance by both students and faculty. The rules for normal progress in the PhD program include some explicit guidelines for such renewals.

What fellowships are available for math grad students?

Fellowship sources vary from year to year. See Research assistantships and fellowships and Graduate student awards for details.

How are fellowships awarded?

Awards for incoming students:

Some fellowships are awarded to incoming PhD students as part of an offer of admission and financial support. Applicants do not need to apply for these awards; every PhD applicant will be automatically considered for all awards for which he/she is eligible. Award decisions are made by the Graduate Admissions Committee.

Awards for continuing students: Recipients of these awards are decided at two different times each year.

- Fall awards: Recipients of the Teaching Excellence Awards are decided in the fall by the TA Advisory Committee, based on feedback from students and faculty supervisors. Recipients of the Academic Excellence Awards are decided in September by the Graduate Program Committee, after evaluating the results of fall prelims together with course grades and reports from faculty. The Graduate Program Committee also awards the McKibben and Merner Fellowships, the Tanzi-Egerton Fellowships, and some departmental fellowships, based on nominations by faculty members.

- Spring awards: The Graduate Program Committee may award more departmental fellowships at its spring renewal meeting.

What is a Research Assistantship? How can I obtain one?

A Research Assistantship is employment designed to give a grad student an opportunity to assist a faculty member with his/her research. Since students are usually employed as Research Assistants by their own PhD advisors, in practice this typically means additional time to work on the student’s own dissertation research, which is usually closely related to the advisor’s research. The department does not have any general funds available for RAships; the only funds for RA quarters are those that are awarded as part of individual faculty members’ grants. Therefore, in general, the only students who are eligible for RAships are those who have passed prelims and begun work on thesis research, and whose advisors have grants that provide RA support. Check with your advisor to see if he or she has RA funding available.

What opportunities are available for summer support?

The UW has a two-month summer quarter, for which quite a few TAs are needed. The jobs are similar to those available during the academic year, except that the quarter only lasts two months instead of three, and there are somewhat more opportunities for teaching one’s own section of a course. Most students are given 11-month offers of support with their original admissions package; as long as they are making normal progress and their teaching performance is satisfactory, these students are guaranteed summer support whenever they want it, for the duration of their original support offer (usually 5 years for PhD students and 2 years for Master’s students). All other students are considered for summer support if jobs are available. If there are not enough jobs for the number of students who request support, the Graduate Program Coordinator will decide whom to hire based on seniority, academic standing, teaching ability, and the need to find TAs who are qualified for specific jobs. In recent years, all math graduate students who have requested summer support have received it.

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