
DEPARTMENT OF MATHEMATICS
GRADUATE HANDBOOK¹

2019-20

Department of Mathematics
<https://www.math.fsu.edu>
Florida State University

¹The current version of the graduate handbook is available at <https://www.math.fsu.edu/~bellenot/StudentResources/Graduate/index.math>.

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1 ADMINISTRATION

- Chair, Washington Mio (mio@math.fsu.edu)
- Associate Chair for Graduate Studies (*the Graduate Chair*), Giray Ökten (okten@math.fsu.edu). Oversees advising, admissions, and financial aid for graduate students.
- Associate Chair, Steve Bellenot (bellenot@math.fsu.edu)
- Directors
 - Ettore Aldrovandi, Director of Pure Mathematics (aldrovandi@math.fsu.edu)
 - Kyle Gallivan, Director of Applied & Computational Mathematics (gallivan@math.fsu.edu)
 - Giray Ökten, Interim Director of Financial Mathematics (okten@math.fsu.edu)
 - Richard Bertram, Director of Biomathematics (bertram@math.fsu.edu)
- Coordinator of Graduate Teaching Assistants, Penelope Kirby (kirby@math.fsu.edu)
- Advisors
 - Elizabeth Scott, Graduate Academic Program Specialist (*the Graduate Advisor*; emscott2@fsu.edu)
Helps graduate students with advising, registration, candidacy requirements, dissertation requirements, and graduation.
 - Jennifer Anderson, Undergraduate Academic Program Specialist (*the Undergraduate Advisor*; anderson@math.fsu.edu).

2 THE GRADUATE PROGRAMS

Department of Mathematics has four graduate programs: Pure Mathematics (<https://www.math.fsu.edu/puremath/>), Applied & Computational Mathematics (<https://www.math.fsu.edu/acmath/>), Financial Mathematics (<https://www.math.fsu.edu/finmath/>), and Biomathematics (<https://www.math.fsu.edu/biomath/>).

Each program has its own admissions committee, required and elective courses, and qualifier requirements. Please visit the program webpages for more information.

3 REGISTRATION AND THE GRID

Every semester, there will be a certain time period when students must register for their classes. A fine is imposed by the university to students who miss the deadline to register for classes.

The Graduate Chair will send a registration memo to students every semester before the registration window opens. Students should consult their director or their major professor, as well as the registration memo, before registering for classes.

In addition, all students working towards a PhD must complete the GRID every semester. This is a departmental online form where we keep track of all the courses and seminars the students are taking, and their schedules. We use GRIDs to check the registration of PhD students, and to schedule the teaching duties for over 90 teaching assistants (TA) who are responsible for students in over 150 sections of our courses. More details on GRIDs will be given by the Coordinator of Graduate Teaching Assistants.

4 GRADUATE STUDENT COUNCIL

The Mathematics Graduate Student Council is a group of eight graduate students who serve as:

- A liaison between the graduate students and the administration, to foster communication
- A formal resource for faculty/staff to find out about issues important to the graduate students
- A resource for helping to acclimate the new class of graduate students into the life of the department
- A resource for new graduate students for navigating some of the technical graduate school requirements

A list of current members of the Graduate Student Council can be found at: <https://www.math.fsu.edu/People/gsc.math>.

5 QUALIFIERS

PhD students must pass qualifier exams required by their program. Detailed information on qualifiers, exam topics, sample exams, and general guidelines can be found at <https://www.math.fsu.edu/qualifiers/>.

Two important rules are:

1. There is a cap set at two attempts: a qualifier in a given subject will not be given again to a student who has failed it twice. (The cap does not include the qualifiers taken by new students in August of their first year, which is known as the “free qualifier policy”.)
2. Funded students - teaching assistants (TA) and research assistants (RA) - must pass their area qualifiers no later than the beginning of the fourth semester of graduate study.

6 TIMELY PROGRESS RULES FOR FUNDED STUDENTS

Milestones to be met by students funded by the department are:

- **Tuition Waiver Awardees:** Students who receive tuition waivers must have at least 3.0 cumulative GPA each semester. If a student fails the GPA requirement, and if it is possible to raise the GPA to the required level the following semester, then a one-time exception may be granted by the Chair to allow the student an additional semester to satisfy the requirement.
- **TA's, RA's, De Witt Sumners Awardees:** Students who are funded by these awards should meet certain milestones in order to have continued funding. Different areas have slight variations in the timing of these milestones and you must consult your director about specific expectations in your area. Students who start receiving funding from the department after their first year are still subject to the same timeline explained below. The general guidelines you must satisfy in order to have continued funding are:
 - The area qualifiers are completed no later than the beginning of the fourth semester of graduate study. There is no additional grace period to complete the qualifiers.
 - The doctoral candidacy exam is successfully completed in the third year, Fall or Spring semesters. A student gets only two chances to pass the doctoral candidacy

exam. If the exam is not passed during the Fall or Spring semesters of the third year, then the Chair may grant an extension to the following Summer term. Funding during the Summer term is not guaranteed, and will not be more than at 0.25 FTE level.

- The dissertation is defended during the fifth year (in recent years we have been able to offer TA support during the sixth year, however, this is not automatic and subject to the approval of major professor, supervisory committee, and the Chair.)
- The following GPA requirements are satisfied. If a student fails the GPA requirement, and if it is possible to raise the GPA to the required level the following semester, then a one-time exception may be granted by the Chair to allow the student an additional semester to satisfy the requirement.
 - * Funded students must have at least 3.000 cumulative GPA each semester.
 - * De Witt Sumners awardees must have at least 3.300 cumulative GPA each semester.

7 SCHOLARLY ENGAGEMENT REQUIREMENT

PhD students must satisfy the Scholarly Engagement Requirement. To do so, PhD students must demonstrate active involvement in the scholarly community through interaction with faculty and peers. This requirement may be met through various scholarly activities including enrollment in graduate courses, attending our weekly colloquium, engaging in collaborative study and research beyond the department, attending area based seminars, presenting or attending professional conferences, and having articles or papers published.

8 YEARLY STUDENT EVALUATIONS

The Graduate School mandates that departments evaluate their graduate students annually. The Mathematics department performs these annual reviews in September. The Graduate Advisor will supply students and faculty with the requisite form, the "Annual Progress Report."

9 TEACHING ASSISTANT TRAINING PROGRAM

All graduate teaching assistants go through a teacher-training program supervised by the Coordinator of Graduate Teaching Assistants. The first assignment of the new TAs is the job

of Proctor in Computer Assisted Instruction (CAI) classrooms. Gradually, as TAs progress in the training program, assignments with higher responsibilities will be made. For more details see <https://www.math.fsu.edu/graduate-general-info/TAttraining.math>.

TAs must go over the Teaching Information Guide for Graduate Students (GIG) which describes the general requirements and obligations of Graduate Teaching Assistants (<https://www.math.fsu.edu/~bellenot/StudentResources/Graduate/index.math>).

10 TRAVEL SUPPORT POLICY

Subject to availability of funds, the department offers financial support to graduate students who are traveling to conferences or workshops to present a talk, poster, or to attend. To be eligible, the student should also apply for a COGS (<http://sga.fsu.edu/cogs-funding.shtml>) travel grant. Also, check if the conference you plan to attend provides any financial support.

AMS, SIAM, and SMB has travel grants for graduate students. Please check their web pages for more information: <http://www.ams.org/programs/travel-grants/travel-grants>, <https://www.siam.org/Conferences/Travel-Support/SIAM-Student-Travel-Awards>, <https://www.smb.org/travel-grants>.

- **ATTENDANCE:** The department provides \$200 for students who want to attend a conference in his/her research area. Funds are allocated on a first come first served basis.
- **POSTERS:** The department provides \$200 for students who are presenting posters at conferences. There are a total of four poster grants. Funds are allocated on a first come first served basis.
- **RESEARCH TALK:** The department provides \$300 to graduate students giving a research talk at a conference. This support is limited to one grant a year for a student.
- **JOB TALK:** There is a one-time department travel grant of \$600 to a PhD student during his/her graduate studies. This is intended to support the student's main job talk. It will likely happen in year 4 or 5 of the student's graduate studies. Students should discuss with their major professor what the most appropriate conference will be for their main job talk.

Special situations such as international or out-of-state trips, as well as the total cost of the trip, will also be taken into account as the funding amount is determined. Depending on the

budget, more support than listed here might be offered. Please let the Graduate Chair know of any special circumstances in your application.

Applications for these travel grants will be made to the Graduate Chair. Please note that this travel support policy is subject to department budget constraints.

How to apply:

1. Email the Graduate Chair with the following information: The name of the conference, the dates, the title of your talk or poster (if you are giving one), the name of your major professor.
2. Ask your major professor to send the Graduate Chair an email supporting your travel.
3. The total (estimated) itemized cost of your trip (lodging, airfare, car rental, etc.)
4. Mention any special circumstances, if any.

11 TAKING SUMMER OFF

A student who is not a doctoral candidate is free to take the summer semester off. However, if you are a TA or RA, you must register in Summer as a full time student.

A doctoral candidate, on the other hand, is required by the university to take at least 2 dissertation hours during summer. The only exception to this rule is the following: If the student will not be using department or university resources, which includes electronic library resources, email, as well as interacting with the student's major professor, then the student can take the summer off. To pursue this option and take the summer off, the student should get an approval from the major professor and the Graduate Chair.

The following university rule on summer registration is taken from the bulletin: http://registrar.fsu.edu/bulletin/graduate/information/graduate_degree/

"A student who has completed the required coursework, passed the Preliminary Examination and submitted an Admission to Candidacy form to the Office of the Registrar, and continues to use campus facilities and/or receives faculty supervision, but has not made a final dissertation submission shall include in the required full-time load a minimum of two credit hours of dissertation per semester, including Summer term, until completion of the degree. A student must be enrolled in a minimum of two hours of dissertation in the semester of graduation."

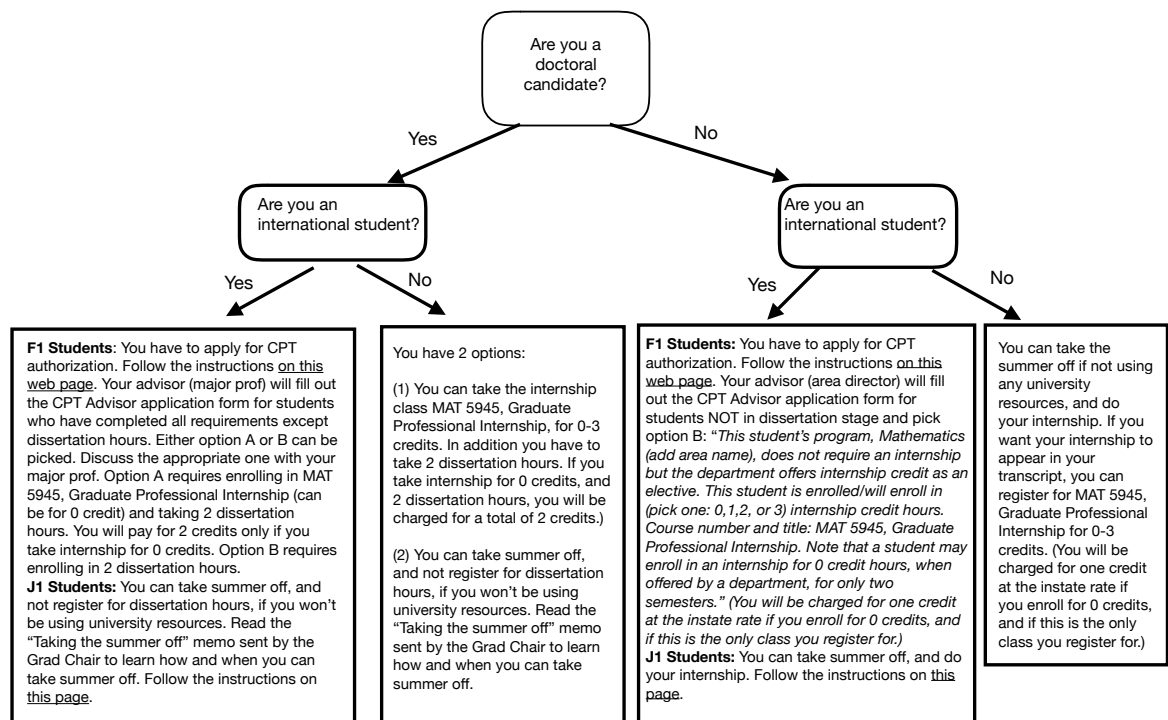
12 INTERNSHIP DECISION TREE

Graduate students are strongly encouraged to explore summer internship opportunities. For students planning for employment in the industry, a summer internship will play a crucial role in securing a good job after graduation. For students interested in a research position after graduation, an internship at a national lab, or in the industry, could provide invaluable experience on the application of mathematics.

Talk to your director or the Graduate Chair to learn more about internships. You can do an internship and earn course credit for it, if you wish. International students need authorization before they can work as an intern. The following decision tree describes the steps that need to be taken before a summer internship.

Summer Internship and Registration Decision Tree

I want to do a summer internship. Should I register for classes or can I take the summer off?



Note for international doctoral candidates on F1 visa: Another option to get permission for an internship through OPT. Read instructions on this page. With OPT, you can take the summer off (or another semester) and not register for dissertation hours, if you are not using university resources. However, this option has some disadvantages. Discuss this option with your international student advisor from the GLOBE.

Figure 1: Internship Decision Tree