Graduate Student Handbook

Department of Mathematics

University of California Berkeley

Revised October 2020

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INTRODUCTION

This handbook is intended to serve as a resource for the graduate students in the Mathematics Department. You may wish to read through these pages when you first start your program of study, or you may refer to the Handbook for specific information as needed.

Since graduate student policies and procedures are always evolving, the Handbook will be periodically updated. The latest version of the Handbook will be available on the Math Department website and a paper copy is available in 910 Evans Hall. New pages may be inserted into the binder as they become available. In addition, the Handbook will appear on the Math Department website.

Best wishes in your study of mathematics!

NOTE: Some of the policies in this Handbook may have temporarily changed due to the COVID-19 pandemic. For an up-to-date list of policy revisions, please refer to The Graduate Division's COVID-19 Information for Graduate Students: https://grad.berkeley.edu/covid-19-information-for-graduate-students/.

GENERAL INFORMATION

1. Degree Programs

Students are admitted for specific degree programs: the Ph.D. in Mathematics or Ph.D. in Applied Mathematics. Requirements for the Mathematics and Applied Mathematics Ph.D.s differ only in minor respects, and no distinction is made between the two in day-to-day matters.

Continuing students wishing to transfer from one program to another should consult the Graduate Student Advisors (also known as Graduate Student Affairs Officers or GSAOs). Transfers between the two Ph.D. programs are fairly routine but should be done prior to taking the qualifying exam.

Students seeking to transfer to Ph.D. programs from other campus programs, including the Group in Logic and the Methodology of Science, must formally apply and should consult the Graduate Vice Chair.

2. Assignment of Advisors

Each graduate student is assigned a First-Year Faculty Advisor, a member of the faculty of the Department who advises the student on selection of courses and guides the student through the various stages of the graduate program. The post of First-Year Advisor should not be confused with that of Dissertation Supervisor (or Thesis Supervisor for students in the M.A. program), who is formally appointed at the time of Advancement to Candidacy. Once a student has advanced, the initial advisor's role ends, and the dissertation/thesis supervisor acts thenceforth as the student's primary academic advisor. The dissertation/thesis supervisor has primary responsibility for guidance of dissertation research and dissertation/thesis preparation, with assistance from other members of the dissertation/thesis committee.

Advisors are assigned to new graduate students by the Graduate Vice Chair. They are chosen from a committee appointed by the department Chair. Both students' expressed mathematical interests, and faculty availability, are taken into account in the process of matching advisors to advisees. Students wishing a change of their appointed advisor should consult the Vice Chair for Graduate Affairs. Once a prospective dissertation supervisor has been chosen by a student, that individual may assume the role of Graduate Advisor, provided that student, advisor, and Graduate Vice Chair approve.

First year students must consult their advisors regularly about their course selections and academic plans. Any student who is unable to contact her/his advisor promptly when necessary should inform the Graduate Vice Chair.

3. Advising and Program Approval

Students should confer with their Advisors about the courses they will be taking. New students should also arrange more leisurely meetings with their Advisors later in their first semester. Students are encouraged to see their Advisor any time they feel it would be helpful, e.g. to talk

about academic difficulties, meeting time limits, setting up a Qualifying Examination committee, or for career advice.

4. Registration Matters

Students register for courses via CalCentral. Students should consult with their advisor before each semester to plan their course of study. In order to enroll in independent research or reading units, students will need to get their advisor's approval. Once approved, students will submit an enrollment form to the GSAO. The vice chair fills in for advisors who are temporarily unavailable.

Once a student has a formally appointed Dissertation Supervisor, that individual acts takes over all advising duties, including signing of the Program Form.

5. Student Course Loads

The normal course load for a full-time graduate student is (1), twelve units of graduate (200-level) coursework, or (2), sixteen units of upper division (100-level) coursework, or (3), a combination of graduate and upper division coursework in proportion to the above loads (e.g. 6 units of 200-level courses and 8 units of 100-level courses). Some courses may be selected from campus-wide offerings outside of Mathematics, with the approval of the advisor.

All full-time students must enroll in at least 12 units of course work each semester. Enrollment in a minimum of 12 units is required for all GSI/GSR/fellowship appointments and for departmental financial support. Some students may potentially be subject to minimum unit requirements in order to qualify for other external financial support; consult the Graduate Assistant, Graduate Fellowship Office, or Berkeley International Office if your circumstances are exceptional.

Besides conventional courses, students have other options for earning the required 12 units. Mathematics 375 (for first semester GSIs) and 303 (teaching units) award unit credit to students appointed as GSIs, in recognition of the professional training they acquire through teaching. Math 602 is an independent study course appropriate for students who are preparing for the Preliminary or Qualifying exams, but are not serving as GSIs. Math 299 (reading courses) and 295 (dissertation research) are suited to students working on an individual basis with faculty.

The Graduate Division publishes an outline of its policies in the Guide to Graduate Policy, available online at: https://grad.berkeley.edu/policy/

6. Withdrawal and Readmission

The rules of the Graduate Division do not provide for leaves of absence for graduate students. It is possible, however, to apply to withdraw and to be readmitted. The student should discuss any plans for temporary withdrawal with his or her Graduate Advisor. Unauthorized withdrawal may jeopardize the student's chances for readmission. A student wishing to withdraw from the graduate program, temporarily or permanently, should speak to the GSAOs.

A student who has not been registered for one or more semesters will be required to submit an application for readmission.

7. In Absentia

In Absentia is a registration status with reduced fees. Students must be advanced to candidacy and must be doing research outside of California for the entire term. Students must register for 12 units of research. The fee is 15% of assessed fees (plus non- resident tuition, if applicable). See the Guide to Graduate Policy for more details.

8. Petitions

All petitions for readmission, change of degree goal, etc., must be submitted to the Graduate Assistant after completion. The Graduate Assistant relays the petition for approval to the authorized departmental officer or committee, and upon approval, forwards it to the appropriate office.

It is each student's responsibility to secure the signature of the Vice Chair for Graduate Affairs on most of the remainder of the Graduate Division petitions, (e.g. Advancement to Candidacy Form, Filing Fee application, etc.). Unless discussion is needed, this can be done by presenting the petition to the Graduate Assistant, who obtains the vice chair's signature on the student's behalf. Graduate Advisors are authorized to sign only the student's program sheet and petitions to change the schedule.

9. AMS Membership

The Mathematics Department offers all graduate students a complimentary membership to the American Mathematical Society (AMS) for as long as that student remains in the Department. As a member of the AMS, the student receives a Bulletin, the Notices, and other privileges such as discounts on books.

10. Establishment of California Residency

The Department has limited resources for funding the nonresident supplemental tuition. THEREFORE, STUDENTS WHO ARE U.S. CITIZENS OR PERMANENT RESIDENTS MUST ESTABLISH CALIFORNIA RESIDENCY AS SOON AS POSSIBLE. The Department **will not** pay the nonresident supplemental tuition for U.S. citizens/permanent residents after their first year. Detailed information on the relevant laws and procedures is given in the section of the Berkeley Academic Guide on "California Legal Residence." Upon arrival in Berkeley, students should begin taking the necessary steps for establishing California residency. Information regarding residency is available from the Residency Affairs Unit in 120 Sproul.

11. Student Addresses

As it is important that the Department know each student's local address and telephone number, students are asked to update their contact information in CalCentral, as needed.

12. Disclosure of Student Records

A copy of the Department's policy on the disclosure of information from student records may be consulted in the Graduate Office. This policy is intended to protect students from unauthorized disclosure of information about them to others; it also guarantees students the right to inspect most materials in their files. To examine teaching evaluations, consult the front office, 970 Evans.

13. Message Boxes, Bulletin Boards, and E-mail

Each graduate student is assigned a message box in room 958 Evans. Students are therefore expected to check them regularly. Students should not use the Department address for receiving mail from off campus; neither the Department nor the campus Mailing Division has sufficient staff to process such mail. UC policy prohibits delivery of personal mail or packages.

Students also will receive important information via e-mail. Mass mailing lists are used by the Department staff, faculty, and MGSA to communicate information regarding colloquia, workshops, job opportunities, and other topics of interest to students. All graduate students are asked to check their e-mail messages daily.

14. Departmental Computing Facilities

Management of facilities: The Department's network is managed by the Information Technology Manager. In addition, rotating members of the faculty serve on the Department's Computing Committee. Anyone having trouble using a departmental computer should reach out to the Department Tech Support Team.

Printers: Printers are installed on the seventh, eighth, ninth, and tenth floors for graduate student and faculty access. The printers are in 744, 838, 958, and 1002 Evans, and are named by room number. Access is via key. Multiple copies of documents should be made using the photocopy machines in room 958, rather than these printers.

15. Resources for Resolving Problems and Complaints in the Department of Mathematics

Please see the [department website](#) for an up-to-date list of contacts.

General grievances in the Mathematics Department: Department Chair

Undergraduate Student Matters: Director of Student Services, Vice Chair for Undergraduate Affairs.

Graduate Student Matters: Director of Student Services, GSAOs, Vice-Chair for Graduate Affairs

Matters related to GSI appointments: GSAOs, Faculty Advisor for GSI Affairs

Sexual harassment, diversity, and discrimination issues: The campus Title IX & Title VI compliance officer; the Math Department Graduate Equity Officer; GSAOs.

Note: The University of California, in accordance with applicable Federal and State Law and the University's nondiscrimination policies, does not discriminate on the basis of race, color, national origin, religion, sex (including sexual harassment), gender identity, pregnancy/childbirth and medical conditions related thereto, disability, age, medical condition (cancer- related), ancestry, marital status, citizenship, sexual orientation, or status as a Vietnam- era veteran or special disabled veteran. This nondiscrimination policy covers student admission, access, and treatment in University programs and activities. It also covers faculty (Senate and non-Senate) and staff in their employment.

Title IX and Title VI federal legislation prohibits all forms of sex and race discrimination in educational institutions that receive federal funding. Do not hesitate to contact these offices directly if you feel that you have experienced or witnessed discrimination in the Mathematics Department, or in the university.

General questions and complaints (Berkeley campus): Ombudsperson for students, Office for the Prevention of Harassment and Discrimination, ASUC Student Advocate's Office

Disabled Students Program: https://dsp.berkeley.edu/

The Disabled Students' Program's mission is to ensure that all students with disabilities have equal access to educational opportunities at UC Berkeley. We oversee a wide range of services, accommodations, and auxiliary services for students with disabilities. We design these services individually, based on the specific needs of each student and individual academic requirements as identified by DSP's Specialists.

Student Grievance Procedure:

The Berkeley Campus Student Grievance Procedure (Appendix II to the Berkeley Campus Regulations Implementing University Policies) gives you an opportunity to resolve complaints alleging discrimination based on race, color, national origin, sex, handicap, age, and sexual orientation. You may also use the procedure to resolve any complaints you may have alleging that any other rules or policies of the Berkeley campus were inappropriately applied and resulted in an injury to you. The procedure is not applicable to certain kinds of complaints for which other appropriate appeals procedures exist, such as a grade appeal based on the application of nonacademic criteria. (See Berkeley Academic Guide information on Appeal of Grades in Courses and Examinations.) The procedure contains important time limitations and provisions about the interrelationship between this procedure and other campus complaint procedures. Copies of the procedure are available in 102 Sproul Hall.

16. Graduation

The University awards degrees at the end of the Fall and Spring semesters. The Department of Mathematics holds its graduation ceremony in the Spring, normally in the latter part of May at

Zellerbach Auditorium. All graduating students in both the M.A. and Ph.D. programs must inform the GSAOs of their status early in the semester in which they plan to graduate. Please also keep the GSAO or vice chair posted concerning post- graduation plans.

M.A. REQUIREMENTS

1. M.A. Degree Requirements

University requirements for the M.A. degree are given in the Berkeley Academic Guide. Chief among them are a two-semester academic residence requirement, a restriction on transfer credit from other institutions, and a choice between two plans:

Plan I: A minimum of 20 semester units of upper-division and graduate courses and a thesis. At least 8 of these units must be in graduate courses (200-level) in the Department of Mathematics at Berkeley (except that in special cases, upon recommendation of the Graduate Advisor and approval of the Dean of the Graduate Division, some of the 8 graduate units may be taken in other departments). Course units are not granted for the thesis.

Plan II: A minimum of 24 semester units of upper-division and graduate courses, followed by a comprehensive final examination. At least 12 of these units must be in graduate courses in the Department of Mathematics at Berkeley (except that in special cases, upon recommendation of the Graduate Advisor and approval of the Dean of the Graduate Division, some of the 12 graduate units may be taken in other departments). All courses fulfilling the above unit requirements must have significant mathematical content. In general, M.A. students are encouraged to take some courses outside the Department of Mathematics, keeping in mind the requirement that normally at least 12 graduate units (or 8 graduate units following plan I) are required in the Department of Mathematics. For both prospective teachers and those planning to work in industry, at least some acquaintance with statistics and computer science is essential, and for a larger number of students, courses in such fields as engineering, biological or physical sciences, or economics are highly desirable. A breadth requirement consisting of at least one course in each of three fields must be met by all students. Fields include: algebra, analysis, geometry, foundations, history of mathematics, numerical analysis, probability and statistics, computer science, and various other fields of applied mathematics. The last category specifically covers courses in a variety of departments, and the Graduate Advisor may allow more than one such course to count toward the breadth requirement. A depth requirement consisting of a coherent program of three courses all in one of the above fields, at least two of these courses being at the graduate level, must be met. Students interested in a field of applied mathematics are encouraged to take some of these courses outside the department.

A member of the Mathematics faculty serves as designated M.A. Advisor; the Graduate Assistant or Vice Chair can inform interested students of the M.A. Advisor's identity. Students should discuss their proposed program of study with the M.A. Advisor and obtain her or his approval as early as possible in their graduate careers, in order to be sure that the program is acceptable.

As soon as the choice between plans I and II has been made and the program approved, the student, assisted by her or his advisor and the M.A. Advisor, should set up the thesis or examination committee. The chair has the primary responsibility for guiding the student's work for the thesis or examination.

2. Advancement to Candidacy

The student must submit an application for Advancement to Candidacy for the M.A. degree by the end of the fifth week of the semester in which the degree is to be awarded. The application for candidacy must be approved by the M.A. advisor, and by the Dean of the Graduate Division, before the M.A. examination can be taken or the thesis submitted for final approval.

3. The M.A. Thesis (Plan I)

The thesis may be expository in nature or may present original research. In the former case, there should be a synthesis of several articles or books. The thesis committee has three members, recommended by the student's Graduate Advisor, and approved by the Dean of the Graduate Division. The chair of the committee (the Thesis Supervisor) must be from the Department of Mathematics, at least one other member must also be from Mathematics, and it is recommended, but not required, that the third member be from another department or group. The student should consult with the committee chair about the subject and plan of the thesis. To be accepted, the thesis must be approved by all committee members. The Graduate Division publishes Instructions for [Preparing and Filing Your Thesis or Dissertation](), available on-line at. The booklet contains all information and regulations regarding the Master's thesis, including specifications, materials, sample title and approval pages, and copyright information.

4. The M.A. Examination (Plan II)

The M.A. examination is a two hour exam consisting of a 45 minute prepared talk on an advanced topic in the student's field of concentration, followed by 15 minutes of discussion on the subject of the talk, followed by two half-hour oral examinations, covering basic material in two different subfields of Mathematics. The student selects these two fields in advance of the examination, in consultation with the examination committee. A syllabus is distributed to the committee members and copy given to the Graduate Assistant with the application Plan 2 at least a month before the exam.

The committee to administer the M.A. examination consists of two or three faculty members approved by the M.A. Advisor and the student's Graduate Advisor; the number of examiners depends on the subjects of the prepared talk and the two half-hour examinations. The chair of the examining committee must be a member of the faculty of the Department of Mathematics. The student should consult with the committee chair concerning the details of the prepared talk. These examinations are scheduled individually; they are not normally given during the summer.

5. Filing Fee

Filing fee status permits eligible students to pay a modest fee in lieu of full registration fees for the term in which they plan to take the exam or submit the thesis. Students must apply to the Graduate Division for Filing Fee status by Friday of the first week of classes in the semester they plan to complete the M.A. **NOTE**: Students must be advanced to candidacy to be eligible for filing fee. For more information regarding the Filing Fee, please refer to the [Guide to Graduate Policy](#). Students wishing to use the Filing Fee option should consult with the Vice-Chair for Graduate Affairs during the semester **before** the one in which they plan to complete their degree. Be aware that students may not hold GSI or GSR appointments while on Filing Fee status, nor may they use University facilities (e.g., the library) without paying additional fees. International students contemplating filing fee status should consult the Berkeley International Office (BIO) in advance, in order to avoid any complications with their visas.

In order to be eligible for Filing Fee status during Fall semester, a student must have been registered during the preceding Spring or Summer semester. Spring eligibility requires registration during the preceding Fall.

Ph.D. REQUIREMENTS

The Department of Mathematics offers two Ph.D. degrees, one in Mathematics and the other in Applied Mathematics. The general rules governing the two degree programs are the same. In outline, to qualify for either of these degrees, the candidate must:

1. Take at least four 4-unit courses during the first year in the Ph.D. program, two or more of which are graduate courses in the Department of Mathematics. Math 375 and 303 do not count towards satisfaction of this requirement.

2. Pass a six-hour written Preliminary Examination, on material which is primarily at the undergraduate level, within thirteen months of entering the program;

3. Pass a three-hour oral Qualifying Examination emphasizing, but not exclusively restricted to, the area of specialization. This examination must ordinarily be attempted within twenty-four months of entering the Ph.D. program. (See below for a discussion of exceptions.) If it is not passed on the first attempt, a second try may be allowed. The second try must be made within thirty months of entering the program.

4. Complete a seminar, giving a talk of at least one hour duration;

5. Write a dissertation embodying the results of original research and acceptable to a properly constituted dissertation committee;

6. Meet the University residency requirement of two years or four semesters.

These requirements are explained in more detail below.

1. Course Requirements

During the first year in the Ph.D. program, the student must enroll in at least four courses. At least two of these must be graduate courses in Mathematics. Math 375 and 303 do not count towards satisfaction of this requirement. Candidates may only use one Math 290 course and one or two Math 299 courses to satisfy this requirement. Alternative combinations of coursework may also be considered and must be reviewed by the HGA for approval.

2. Preliminary Examination

The Preliminary Examination consists of six hours of written work given over a two-day period. The examination covers material, mainly in analysis and algebra, which should be part of a well-prepared student's undergraduate training. The Preliminary Examination is offered twice a year — during the week immediately preceding the first week of classes of both the Fall and Spring semesters. Because one is required to pass within thirteen months of the date of entry into the program, one has three chances to take the exam. There is no penalty for failing, and students are strongly advised to attempt the Prelim each time it is offered until they have passed. A student who does not pass the Preliminary Examination within thirteen months will not be permitted to remain in the program past the third semester, except under exceptional circumstances. Students requesting exceptions must submit a petition to the Vice Chair of Graduate Affairs.

Students who need special accommodation for the prelim must obtain a letter from the [Disabled Student's Program](#) and must contact the chair of the Preliminary Examination Committee ten days before the exam so that any necessary arrangements can be made.

An abundance of material very useful in preparation for the Prelim is posted on the Department's web site. Moreover, the Mathematics Opportunity Committee (MOC) sponsors a Prelim Workshop each Summer and Fall, open to all students in the Department. See the MOC section for more details.

3. Qualifying Examination

3.1 The Qualifying Examination Committee

The student is responsible for taking the initiative in setting up a Qualifying Examination committee. The student should contact a faculty member in his or her intended field of specialization, who ordinarily is the prospective dissertation supervisor, and ask that individual's help in assembling an examination committee and constructing an examination syllabus.

The examination committee has four members and should consist of at least two members of the Mathematics faculty. The Chair of the Qualifying Examination must be a member of the Math Department. The same person cannot be both the Chair of the Qualifying Examination Committee and the Dissertation Committee.

Further details can be found in the Guide to Graduate Policy document, available on Graduate

Division's website.

3.2 The Examination Syllabus

A qualifying exam covers three principal topics. Example: algebraic number theory, operator algebras, Lie groups. Two of these are designated as main topics, and one as a minor topic, which is examined in less depth than the others.

The subjects to be covered in the examination are decided jointly by the student and the committee, well in advance of the exam. The Department is formally (and somewhat arbitrarily) divided into six sections, described on the web site. The examination must contain material falling within at least two of these sections. In most cases, there is one area of concentration which has been studied in depth, divided into two main topics, plus a separate secondary area, the minor topic, in which the student can display reasonable proficiency. The official syllabus for the exam must list three subject areas, and for each, must explicitly designate which departmental section it falls within. Copies of departmental Qual syllabi from recent years can be found in the QE Resources Folder on the Math Department's website. This material is useful to students in the construction of their own syllabi.

The examination syllabus is subject to review by the faculty of the two or more sections in which the examination is to be taken. At least **eight** weeks before the examination is to be taken, a reasonably detailed syllabus, approximately one page in length, is to be circulated to all members of each relevant departmental section. The Graduate Assistant will distribute a PDF copy of the syllabus to the appropriate faculty. The outline must specify the names of the examiners, the section to which each of the three topics belongs, and the proposed date for the examination. Archived syllabi are a good guide to help with formatting.

A faculty member wishing to object to a proposed examination outline must do so within two weeks of the date of circulation of the syllabus. Formal objections should be directed to the Vice Chair for Graduate Affairs, but the faculty member may wish first to discuss the objection informally with the student or a member of the committee. The student should not assume that the examination syllabus is approved until this two week period has elapsed. In recent years, such objections have been rare. If there is serious disagreement over an examination proposal, the examination may have to be postponed until the disagreement is resolved. The student is responsible for organizing his or her schedule to allow for such potential delay; circulation of the outline earlier than required is a wise precaution.

3.3 Application for the Qualifying Examination

At least **four** weeks before the examination is to be taken, the student must file a formal application for the Qualifying Examination on the appropriate departmental form. It specifies the final plan for the examination, and the membership of the examining committee. Qualifying Examination committees can be constituted only by the Dean of the Graduate Division, and the examination must not be taken before the committee is formally constituted. The four-week deadline is necessary to give the Graduate Assistants and the Dean's office time to do the required paperwork, and is strictly enforced by the Dean's office.

A qualifying exam is not valid without Graduate Division's approval of the application, and if this approval has not been obtained prior to the scheduled date the exam will have to be postponed.

The application must state whether the exam is in preparation for the Ph.D. degree in Mathematics, or in Applied Mathematics. A student who passes the Qualifying exam for one degree, then later wishes to obtain the other degree, will be required to retake the exam

3.4 Time Limits

The Qualifying Examination must be taken within 24 months of the date of entry into the Ph.D. program. It is sometimes possible to request short extensions of this time limit (e.g. to the beginning of the Fall semester of the third year). Requests for extensions to the Fall semester of year 3 should be made to the Vice Chair for Graduate Affairs. These should be carefully justified and, in particular, should specify a plan of study which will prepare the student to take the examination at the proposed time.

It is possible to arrange Qualifying Examinations over summer; however it can be more difficult to arrange due to faculty travel.

International students please note that the Department does not provide the nonresident supplemental tuition support beyond the end of the second year. The Qualifying Examination must be passed, and the paperwork required for advancement to Ph.D. candidacy completed, before a semester begins, in order for a student to qualify for exemption for nonresident supplemental tuition. This exemption is valid for three years.

If a student does not pass on his or her first attempt, then on recommendation of the examining committee, and with the approval of the Graduate Division, a second attempt may be permitted. Graduate Division requires that at least three months must elapse between the two attempt, and that the examining committee must be the same; reconstitution of the examining committee is possible only under extraordinary circumstances. By departmental rules, the second attempt must take place within thirty months of entrance into the Ph.D. program. Graduate Division does not permit third attempts.

3.5 Examination Committee Chair

Since Qualifying Examination committees consist of at least four people, there must be a chair responsible for seeing that the examination proceeds smoothly and fairly. Graduate Division rules require that the chair not be the student's eventual Dissertation Supervisor, in order to ensure fairness. The student should therefore choose as committee chair that member least likely to serve as Dissertation Supervisor. The eventual dissertation supervisor need not be a member of the Qualifying exam committee. It is common for the dissertation committee to be a subset of the Qualifying exam committee, but this is not required.

3.6 Preparation

At the Qualifying Examination, students must demonstrate that they know and understand

important definitions and results, can prove these results, can apply them to particular problems, and can give relevant examples. In addition to taking courses, reviewing their contents, and independently studying texts, many students find it to be valuable to have more experienced fellow students administer "mock" or "practice" examinations. This can give the student a sense of what to expect, what it is like to organize one's thoughts and formulate them clearly "on one's feet", and whether one's command of the material is adequate. The mock examiner should criticize both the answers and the presentation. Repetition of the mock exam may be helpful if areas of weakness are revealed.

3.7 Dissertation Supervisor

The departmental legislation governing the Qualifying Examination system contains the following provision: For a student to pass the Qualifying Examination, at least one member of the subject area group must be willing to accept the candidate as a dissertation student if asked.

This means that, even if the student's performance on the examination is otherwise passing, the student does not pass unless some member of the faculty certifies willingness to accept him or her as a dissertation student. This provision ensures that examination committees do not—out of indecision or misguided kindness—pass students who have no realistic hope of finding Dissertation Supervisors. It also serves to divert students from subfields in which there are more students than the available faculty can effectively supervise. A student who has not already been accepted by a Dissertation Supervisor should pay attention, in setting up the Qualifying Examination committee, to include some faculty members who are willing to accept additional research students. The student is not required to actually select as Dissertation Supervisor a member of the Qualifying Exam committee. However, in the majority of cases, the student makes a tentative choice of supervisor in advance of the exam, and the prospective supervisor is aware of this choice, and serves on the exam committee.

4. Seminars

Each student is required to complete a seminar in which they give a talk, at least 50 minutes in duration. Seminars generally explore the frontiers of knowledge and help in preparation for research. On completing the seminar, the student should file with the Graduate Assistant a departmental seminar completion form, signed by the faculty member in charge of the seminar. The student need not be registered in a seminar course to fulfill this requirement. However, a faculty member must be present and be willing to sign the appropriate form. The seminar should normally be given in the Department of Mathematics; proposals to accept a seminar from another department in fulfillment of this requirement will

be granted only exceptionally and only if approved in writing by the student's Graduate Advisor before the seminar is given. The seminar requirement must be satisfied within eighteen months of advancing to candidacy.

In addition to the seminar requirement, it is expected that every student completing the dissertation will make at least one presentation on their research to a Seminar in the Department. A single seminar can simultaneously fill this expectation and the requirement

described in the preceding paragraph.

5. The M.A. Degree for Ph.D. Candidates

In our program, most Ph.D. students do not ever receive the M.A. degree; but it is easy to do so if one so wishes. Students in the Ph.D. program who wish to earn the M.A.. degree must:

• Apply formally for advancement to candidacy for the M.A. by the fifth week of classes in the semester the degree is to be awarded.

• Obtain certification from the designated M.A. Advisor that the program of study meets departmental breadth and depth requirements. (Most reasonable programs of study for the Ph.D. meet these requirements without difficulty.)

• Pass an M.A. comprehensive examination or write an M.A. thesis.

Further details are available from the Graduate Assistant.

6. Advancement to Candidacy and Dissertation

Students must advance to candidacy by the end of the semester following the one in which the Qualifying Examination was passed. To be eligible to be advanced to candidacy, the student must:

• Pass the Qualifying Examination.

• Obtain a Dissertation Supervisor.

• Obtain the agreement of an additional committee member from inside the Department, and a third committee member from outside the Department, to serve on the dissertation committee.

After the student passes the Qualifying Examination, They will submit an eform in CalCentral to formally Advance to Candidacy Rules governing the constitution of the dissertation committee are given in detail in the Guide to Graduate Policy.

Advancement to Ph.D. candidacy confers upon a student full exemption from nonresident supplemental tuition charges for a period of three years. Students who are not legal residents of California are again subject to nonresident supplemental tuition charges after expiration of this exemption.

7. Annual Progress Report

Once a year, a student advanced to candidacy is required to meet with a member of the dissertation committee in order to discuss his or her progress over the past year and plans for the coming year. After the meeting Graduate Division rules require that a written report on the outcome of this

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discussion must be submitted to the Graduate Assistant before the end of the Spring semester and is forwarded to the Dean of the Graduate Division. A report is filed with the Graduate Division by the dissertation supervisor.

The Graduate Vice Chair monitors the progress of all students and attempts to meet individually with most students, especially those not yet advanced to candidacy, once each year. Students are required to participate in these meetings when requested to do so.

The academic progress of a Ph.D. student in the dissertation stage is assessed by the Graduate Vice Chair in consultation with the dissertation supervisor.

8. Dissertation Matters

The dissertation committee has the responsibility for determining whether a submitted dissertation draft is acceptable for the Ph.D. The student must keep in touch with all members of the committee, who cannot be expected to approve the dissertation without adequate time to read it. Graduate Division rules require that members of the committee be allowed two months to read the dissertation. The student may have to make special arrangements with any members who will be out of town at a time when their advice or signatures are needed. Whether or not the student is in Berkeley when the dissertation is filed, it is the student's responsibility to be informed of and to meet all deadlines for filing final forms with the Graduate Division. The Department will not assume this responsibility, but the Graduate Assistant is available to advise and students of requirements and procedures. Students should let the Graduate Assistant know when they anticipate completing work for the Ph.D., and should please inform the Graduate Assistant and Vice Chair for Graduate Affairs of their post-graduation plans.

The Graduate Division has instructions online for [Preparing and Filing Your Thesis or Dissertation](). The instructions contain all information and regulations regarding the Ph.D. dissertation, including specifications, materials, sample title and approval pages, and copyright information.

9. Filing Fee

Filing fee status permits eligible doctoral students to pay a modest fee in lieu of full registration fees for the term in which they file their dissertations. Students on filing fee status are not registered, and do not pay nonresident supplemental tuition. Students must apply to the Graduate Division for Filing Fee status by Friday of the first week of classes of the semester in which they plan to file their dissertations.

For more information regarding the Filing Fee, please refer to discussion above under M.A. degrees, as well as to the [Guide to Graduate Policy](). Students wishing to use the Filing Fee option should consult with the Vice-Chair for Graduate Affairs during the semester before the one in which they plan to complete the degree. Be aware that students may not hold GSI or GSR appointments while on Filing Fee status, nor may they use University facilities (e.g. the library) without paying additional fees. International students contemplating Filing Fee status should consult the Berkeley International Office (BIO) to avoid any complications with their visas.

FINANCIAL SUPPORT

1. Departmental Support

The current policy of the Department is to offer five years of full financial support to every student entering the Ph.D. program, contingent on satisfactory academic progress and satisfactory performance of any teaching duties. This includes a stipend/salary, plus full remission of registration fees, plus nonresident supplemental tuition for a limited period (see below). Fellowships from any sources, and Graduate Student Instructor (GSI) and Graduate Student Researcher (GSR) positions from the Department of Mathematics or other departments on campus, count as part of this promised support. Loans and outside employment do not count. Students may ask their faculty advisors for suggestions on other sources of financial support.

All students must submit the Funding Identification Form to the GSA each semester that they are enrolled. These are due in March and October for the fall and spring terms respectively and will be sent via email to students each term. They are required for all students requesting departmental support, including registration fee and nonresident supplemental tuition remissions, and GSI, GSR, and fellowship appointments. All domestic students are asked to fill out the Free Application for Financial Assistance Application (FAFSA).

Elements of the definition of "satisfactory academic progress'' include passing the Preliminary and Qualifying Examinations by prescribed dates, maintaining a GPA of at least 3.1, and progressing towards completion of the dissertation after passing the Qualifying exam. Determination of satisfactory academic progress is made by the Graduate Vice Chair, in consultation with individual advisors and with other faculty when appropriate. Students transferring to Berkeley from other graduate programs should discuss the Department's expectations for their progress with the Vice Chair early in the first semester of enrollment. Extension of a particular time limit by Committee Omega does not automatically entail any extension of other subsequent time limits, nor does it automatically entail a corresponding extension of financial support.

1.1 Graduate Student Instructor Positions

The Department offers a limited number of 50% Graduate Student Instructor (GSI) positions. Applications are solicited each semester via procedures consistent with the union contract. Students desiring GSI appointments must apply via the above mentioned Funding Identification Form. Holders of certain internal and external fellowships may be eligible for partial GSI appointments. In exceptional cases, including those involving special departmental staffing needs, students are hired up to 75% appointments, but ordinarily acceptance of more than 50% employment is discouraged, especially for first-year students.

The department strongly prefers that its students teach for the Math Department but departments such as Physics, Statistics, Computer Science, and others, occasionally have additional GSI positions available for their classes which they fill with graduate students from other departments. Students interested in teaching for another department may do so once, on an

exceptional basis, without negative impact to their funding. Interested students must submit an exception request to the department prior to the Funding Identification Form deadline. Payment of your full promised level of support is contingent upon serving as a GSI for the Mathematics Department and accepting a 50% appointment. Students may be granted a one-semester exception to teach in another department instead and still receive their full promised level of support. If a student chooses to teach in another department beyond the one allowed semester, they forfeit any additional department funding for that term.

D . University policy strictly prohibits graduate students from holding a GSI appointment for more than 12 semesters; there are no exceptions to this policy.

For more information, see the Graduate Student Instructor section.

1.2 Graduate Student Researcher Positions

A number of positions as Graduate Student Researchers (GSR) are also available. These are funded by research grants held by individual faculty members or groups of faculty, and are awarded at the discretion of those faculty. Most GSR positions go to advanced students engaged in dissertation research under the supervision of grant principal investigators.

1.3 Fees & Nonresident Supplemental Tuition (NRST)

Part of the Department's support offer to incoming Ph.D. students consists of fee remissions and, when applicable, nonresident supplemental tuition (NRST) coverage. For US citizens and permanent residents, the Department covers NRST **only for the first year**. Domestic students are expected to become legal residents of California by the beginning of year 2, thereby becoming exempt from NRST charges. For international students, NRST is covered by the Department for the first two years of study, after which students are expected to have advanced to Ph.D. candidacy. Upon advancement to candidacy, NRST will be waived for six consecutive semesters. If a student is still in the program beyond the duration of the NRST waiver, they must apply for an exception via the GSAO for Vice Chair approval of departmental NRST coverage. Exceptions will be made on a semesterly basis, and are contingent upon the student's satisfactory academic progress and available funding.

1.4 Readerships

Limited income, and in extenuating circumstances where a student is ineligible to teach, fee remission, may be earned through employment as a reader. Applications for readerships are available from Marsha Snow. Preference in hiring is given to the Department's graduate students. First-year international students who are on fellowship, but seek limited employment in order to qualify for US social security numbers, sometimes find reader positions to be useful.

1.5 Tutors

Some graduate students choose to earn money as tutors. Tutors make their own individual arrangements, but the Department maintains a registry of tutors on the Math Department website.

To be included on the tutor list, speak with Marsha Snow.

1.6 Summer Teaching

The application for Summer Sessions GSI appointments is made available mid-spring semester. Since summer GSIs are entirely responsible for the conduct of their classes, more weight is given to teaching ability and experience for summer appointments than for academic year appointments.

1.7 12-Unit Rule

Only full-time students are eligible for GSI and GSR appointments, and for certain other types of funding. In order to qualify as a full-time student in a given semester, one must be registered for at least 12 units of coursework for the duration of the term. Some students may choose to seek accommodations through the Disabled Students' Program (DSP) for a reduced course load.

Most graduate-level classes are four units each. Many students in the first two years of study, however, find that two courses, plus a 50% GSI appointment, constitutes a full schedule. For students in this position, several options are available in order to meet the 12 unit requirement to qualify for full-time status. (i) Math 375 (4 units) trains new GSIs in teaching, and is required for all students in the first semester of GSI appointment. (ii) Math 303 provides credit for the professional training which students gain through GSI service. 303 is worth 4 units for students holding 50% appointments, and 2 units for 25% appointments. It can be taken a maximum of 4 times. It cannot be taken concurrently with 375. (iii) Independent research (295) can be worth up to 12 units, so for students who have advanced to candidacy, this is often the preferred option. Students who have not yet advanced, but are doing supervised reading (e.g. in preparation for the Qualifying exam) under the direction of individual faculty, should register for 299. (iv) Math 602 provides variable unit credit for independent study in preparation for Preliminary or Qualifying examinations.

2. Support Outside the Department

The Department encourages students to explore other possible sources of fellowships and employment. Fellowships for Berkeley graduate students fall into three main categories: University multi-year fellowships, Mathematics Department fellowships, and extramural fellowships. The last category includes all fellowships funded by sources outside of the University, such as government agencies (including NSF and NPSC), foundations, and corporations. The Fellowships Unit of Graduate Division is a helpful resource for students seeking information on fellowships funded by the University and outside sources.

2.1 University Financial Aid

University financial aid consists of loans, grants, or a combination thereof, the amount depending on the student's need as calculated by the Financial Aid Office. Only U.S. citizens and those with permanent residence status may apply for funds administered by the Financial Aid Office. It is rare for Mathematics graduate students to receive financial support of this type.

2.2 Graduate Division Fellowships

The Office of the President and the Graduate Division offer two types of fellowships for continuing graduate students who are U.S. citizens or permanent residents. The fellowships are:

- • University of California Dissertation-Year Fellowship: Eligibility requirements include evidence that applicants can complete the dissertation during the award year.

- • Mentored Research Award: Eligibility requirements include provision for a faculty mentor to monitor the student's progress. These fellowships are appropriate for students who have just passed the Qualifying Exam.

Students do not apply directly for these fellowships, but can ask to be nominated by the Department. Nominations include letters from students' advisors and the Graduate Vice Chair. Nominations are made in March. Students interested in being nominated should contact their advisor and the Vice Chair.

GRADUATE STUDENT INSTRUCTORS

Mathematics Department Information Manual for GSIs

UC Berkeley Department of Mathematics

INFORMATION MANUAL FOR GRADUATE STUDENT INSTRUCTORS

Welcome to GSI service in the Department of Mathematics. This set of instructions is designed to introduce you to your responsibilities as a GSI. We hope that you will read them carefully and refer to them whenever necessary during your appointment.

In the hiring of college and university faculty throughout the United States, including Berkeley, great emphasis is placed on teaching ability. The Department of Mathematics offers you, as a GSI, direct assistance and experience, both deep and varied, to help you to become a well-qualified teacher of mathematics.

THE DUTIES OF A GRADUATE STUDENT INSTRUCTOR

Your duties as Graduate Student Instructor (GSI), under the supervision of a faculty lecturer, include conducting discussion sections, holding office hours, consulting frequently with the faculty lecturer, attending the lectures, correcting examinations, and, at the discretion of the instructor, grading homework and/or providing homework solutions.

The lecturer sets the pace for the course, determines the grading policy, presents the main lectures, assigns the homework, makes up the examinations, and supervises/assists the GSIs in

grading the examinations. Typically, GSIs do not lecture in the discussion sections. Instead, they review homework assignments and guide the students in problem solving.

Since it is the GSIs who meet with students in small groups, it is your responsibility to get well acquainted with your students, to find out what the students' problems are, and to help remedy these problems. You should inform the lecturer of the progress of the students, and call to their attention material with which the students are having unusual difficulties.

You should see the faculty lecturer with whom you are teaching prior to meeting your first discussion sections. If the lecturer does not call a meeting or send instructions, or if you are appointed late and miss the meeting, you are ultimately responsible for making contact. You should let the lecturer know how to reach you on short notice.

First-time GSIs must complete a number of requirements before and concurrent with their first term teaching. These requirements are detailed on the [GSI Teaching & Resource Center's website](#), but summarized here:

- Enroll in and successfully complete the pedagogy course, Math 375, prior to or concurrent with first term teaching. Note that prior teaching experience elsewhere does not exempt new GSIs from this course.

- Attend the GSI Teaching & Resource Center's Conference for First-Time GSIs. International students must also attend their conference for international GSIs, typically held the day prior. Advance registration is required for both conferences.

- Complete the online course, Professional Standards and Ethics in Teaching, before interacting with students.

Service begins on the first day of the semester (approximately one week before the start of instruction). You are expected to be available during that week, even if you have not yet been assigned to a specific class. You are also expected to be present at the end of the semester until all exams have been graded, grades submitted, and gradesheets and final exams are submitted to 970 Evans Hall. Be sure to obtain the approval of your faculty lecturer before scheduling your departure from Berkeley at semester's end; allow adequate time for the grading of final exams and the computation and recording of final course grades.

Faculty evaluations of their GSIs are requested at the end of the semester. These evaluations are included in your file and are available for your inspection.

HOMEWORK AND QUIZZES

Due to budget constraints, which vary from year to year, the Department may be unable to provide readers for lower division classes. The faculty lecturer may ask you to create and administer periodic quizzes, as a means of evaluating section work. They might also ask you to provide homework solutions on a rotating schedule with the other GSIs for the course. They may instruct you to grade homework. GSI duties for your assigned course will be sent to you as

Attachment A of your appointment letter, and you should review these duties before accepting any appointment.

TEXTBOOKS

GSIs are entitled to copies of the course text, which must be returned at the end of the semester. You may obtain your copy in 970 Evans Hall. Since you are responsible for replacing lost or stolen textbooks, you should never leave them unattended.

REPRODUCTION OF CLASS MATERIALS

Departmental copy machines are located in 958 Evans; please the building coordinator for access & further information.

OFFICE HOURS AND OFFICE ASSIGNMENTS

GSIs with 6 hours of discussion per week should hold three office hours per week. GSIs with 4 hours of discussion per week should hold two office hours/week.

Offices are provided so that GSIs have suitable spaces in which to hold office hours. In recent years, resources have been sufficient for all Mathematics graduate students to be assigned office space. Assignments are made by the Mathematics Graduate Student Association (MGSA) through its annual office draw procedure.

REVIEW SESSIONS

Many GSIs hold review sessions for their students before each examination. Often, several GSIs for the same course will take turns holding these sessions. One-time room reservations for a classroom for review sessions or other additional class meetings may be made by completing request forms available in 970 Evans Hall. Room requests should be made at least one week in advance of the day needed.

ABSENCES

GSIs should make every effort to attend all their section meetings. However, if you must miss one or more section meetings, you should notify both the faculty lecturer and Director of Student Services as far in advance as possible. **It is your responsibility to arrange for a replacement.**

If you are unable to attend a scheduled office hour, you should leave a note on your office door beforehand. If you need to cancel an office hour on short notice, call the Front Office, 510-642-6550, and ask to have a note posted on your door. If you are using bcourses, an announcement about the cancellation should be shared there, as well.

GRADES

The faculty lecturer determines the grading structure for the course, i.e., the percentage based on the exams, homework and quizzes, class participation, etc. GSIs, however, maintain the grade record for each of their students on detailed grade sheets (available in 970 Evans). These grade

sheets must be neat and legible. The **original** sheets must be submitted with the final grades. The detailed grade sheets are kept on file, and provide the administration with a means of identifying the grading system if problems arise. It has happened that undergraduates have noticed genuine errors in their grades two or more years after the fact, after their GSIs had themselves graduated. Only well maintained grade records permit the righting of such wrongs.

The Department will not release grades directly to students or post them. The posting of grades with students identified by name, or alphabetically by student identification numbers, violates Federal and State confidentiality statutes.

Students have access to their grades shortly after their posting in CalCentral.

You may have a student request an Incomplete for the course. The decision to award an Incomplete can only be made by the faculty lecturer. Students contemplating incompletes grades should be advised to consult the faculty lecturer and their major advisors immediately.

STUDENTS WITH DISABILITIES

Students with disabilities (visible or not) may present to you letters from the Disabled Students Program requesting or recommending special accommodations. Such matters should be discussed with the faculty lecturer before any action is taken.

FERPA – PRIVACY ISSUES

By University regulations you are not permitted to discuss a student with other parties. This includes the student's parents. You cannot discuss grades, performance, attendance, or any other issue relating to the student.

EXAMINATIONS

The number of midterm examinations varies at the discretion of the faculty lecturer. Final examinations are mandatory in all undergraduate courses.

A listing of final examination dates and times can be found on the online schedule of classes for each semester. The listing is by exam group, which is determined by the hour and days in which the class is scheduled. GSIs are required to proctor and grade both midterm and final exams, according to the instructions of the faculty lecturer. If you are planning to leave town, make sure you will be around for at least two days after the final, and verify with the faculty lecturer the date on which you are free to depart. It usually takes at least two days to grade exams and to determine and record final course grades. GSIs are responsible for entering their final grades via the e-grades system. Note: Grades for a course cannot be submitted until all GSIs have entered grades for their sections.

EVALUATIONS

Near the end of the semester, online course evaluations will be made available to students enrolled in the GSIs discussion sections. These are completed anonymously, kept in an online database

available to the department, and are available for GSI review after submission of final course grades. Evaluations are a factor in future GSI appointments and assignments. They are taken into account in the University Outstanding GSI Award competition. **It is strongly recommended that you review your evaluations and consider if and how you can incorporate constructive feedback.**

ABSENCES

GSIs should make every effort to attend all their section meetings. However, if you must miss one or more section meetings, you should notify both the faculty lecturer and Director of Student Services as far in advance as possible. **It is your responsibility to arrange for a replacement.**

If you are unable to attend a scheduled office hour, you should leave a note on your office door beforehand. If you need to cancel an office hour on short notice, call the Front Office, 510-642-6550, and ask to have a note posted on your door. If you are using bcourses, an announcement about the cancellation should be shared there, as well.

Guidelines for handling GSI absences

Graduate Student Instructors play a crucial role in the teaching mission of the department. The teaching in discussion sections by GSIs complements the traditional lecture format provided by the instructor of the course, and often the GSI is the primary instructional contact for students. In addition, GSIs play an essential role in the administration of the course including grading, proctoring, and managing unusual circumstances that arise.

The terms and expectations for GSIs are detailed in a variety of sources, including meetings with the instructor in charge of the course they are teaching, Math 375, the graduate student handbook, and the union contract.

The purpose of this document is to clarify and elaborate upon math department policies regarding leaves that would be considered under paragraph F of Article 17 of the union contract. This includes, but is not limited to, requests for leave to attend conferences or to present research at other institutions.

When requesting a leave from GSI duties, early (when possible) and clear communication with the instructor is of paramount importance. The granting of such leaves are at the discretion of the faculty supervisor.

It is important to recognize the impact that leaves have on students, fellow GSIs, and the faculty member in charge of the course. For example, an absence from grading an exam, even with an arranged substitute, can significantly affect the workload of fellow GSIs and the faculty member in charge, GSI input is often an important consideration when determining grade distributions, and a substitute grader, while mathematically qualified, may not be sufficiently familiar with an instructor's expectations and with a specific semester's content to grade fairly. An absence from office hours or section immediately preceding a midterm can significantly affect the preparation of students for such an exam, and so on.

Handling short-term absences to attend conferences and other professional development.

The department recognizes the dual role of graduate students as both instructors and students, and tries to support activities related to their professional development. Ordinarily GSIs are aware of conflicts arising from such activities long in advance and should notify the instructor of their request for leave as soon as they are aware of the conflict, frequently at the beginning of the semester. If the request is granted the GSI should arrange for a suitable substitute, notify the instructor of who is covering the GSI's duties in their absence, and ensure that the instructor approves of the arrangement. It is against department policy for a GSI to pay for the substitute's work.

Handling unexpected absences

If you must unexpectedly miss a section meeting, you should, as soon as possible, notify the instructor in charge and the Director of Student Services. In an emergency where the instructor in charge cannot be reached it is better to arrange a qualified substitute without any approval than to allow a class to go unmet. If you are unable to attend a scheduled office hour, you should leave a note on your office door beforehand.

Further advice

Unusual and unexpected situations may occasionally arise affecting your GSI appointment. If you have any questions or concerns related to your GSI appointment please see the instructor in charge of your course, the Director of Students Services, or the Vice-Chair for Graduate Affairs.

FREQUENTLY ASKED QUESTIONS:

Payroll questions

Pay rate is determined by step level. See your appointment letter for pay rate information. Paychecks are issued on the first day of each month (September through January; February through June), and are available on the last working day of the month if the 1st falls on a Saturday or Sunday. You may set up direct deposit and view the details of your paycheck via UCPath.

Student Health Insurance Program (SHIP) fee remissions will be available for graduate students appointed to 25% time or more.

What should I do if I know my students are struggling in the course (e.g., if they receive a D or F on their first exam)?

This is a complex question, one that has no easy answers but highlights a vital role filled by GSIs. Often, GSIs are the first university personnel to become aware of students' difficulties. You should establish personal contact with any such students after the first exam, perhaps by a note on their exam inviting them to see you for assistance. You should familiarize yourself with the services of the **Student Learning Center**, **Disabled Students Program**, **and the L&S Office of Undergraduate Advising**, which can provide counseling and assistance for students before their academic difficulties worsen. You may also refer them to their undergraduate major advisor

What should I do if a student comes to me with a personal problem?

Students are more likely to come to GSIs than to professors with personal problems. While some personal contact and advice is certainly within the domain of your role as GSI, for larger personal problems you should refer students to the health services on campus available for them. Among these are the **Counseling and Psychological Services** office, **The Tang Center**, **Social Services and Patient Education**, and the **Gender Equity Resource Center**. It is a good idea to familiarize yourself with the different services provided by these resources for both your personal benefit and to better support the undergraduates you will be teaching.

If you are concerned about a student, please also contact the Director of Student Services.

I find myself attracted to a student in my section or in the course. Is it appropriate to date them?

Absolutely not. While you are in a professional relationship with a student, a personal relationship which could in any way color your ability to remain objective is forbidden by university policy. Should such a relationship develop throughout the course of the semester, or should a former (or ongoing) romantic partner enroll in a course you teach, speak to the instructor immediately in order to disqualify yourself from having any input on this student's academic progress.

DIRECTORY FOR GSIs

Director of Student Services: Christine Tobolski
See for: student concerns, personal absences, other issues ; textbooks (temporarily), grading issues (temporarily)

Graduate Student Advisor: Isabel Seneca
See for: course assignments, funding & payroll questions

Building Coordinator/Facilities/Computer: Jasan Fujii
See for: computer accounts, card keys for Evans, office keys

Curriculum Analyst: Jennifer Sixt
See for: classroom changes, enrollments, evaluations

Front Office Assistance: TBD
See for: one-time room reservations, textbooks, grading issues

DEPARTMENTAL POLICIES ON GRADUATE STUDENT INSTRUCTORS

APPOINTMENT

The Department generally pledges funding to incoming Ph.D. students for five years of graduate study in Berkeley. A large fraction of this funding is in the form of GSI positions.

The Department's support offer is made contingent on satisfactory academic progress, and satisfactory performance of all teaching duties. Continuing students apply for GSI positions for the following year by filling out the Support Application Form in early spring. The progress of continuing students is reviewed by the Department later in the semester. Continuing students who have applied for GSI positions for the following year, who have not yet exhausted their promised departmental support, and who meet the criteria for continued support, will receive offers of GSI positions in writing during the summer.

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ENGLISH PROFICIENCY REQUIREMENT

The University requires a student who checked on the Intent to Register form that English is not their first language to satisfy an English proficiency requirement before receiving an appointment as a GSI. Please refer to the [GSI Teaching and Resource Center's website](#) for more information on how to satisfy this requirement.

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GRADUATE DIVISION REQUIREMENTS

All GSIs are required to meet the following requirements imposed by the Graduate Division:

1. Full-time registration (12 units) during the appointment.

2. Minimum grade point average of 3.1.

3. Maximum of two "I" grades.

4. Maximum of eight semesters as a Graduate Student Instructor.

5. Maximum of 50%-time appointment during any semester.

Failure to meet conditions 1 & 2 may result in the cancellation of an appointment by the

Graduate Division, and could affect future appointments. Conditions 3, 4, & 5 can be waived with written justification, except that the four-year maximum in condition 4 is never raised beyond twelve semesters.

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LOGIC AND METHODOLOGY OF SCIENCE STUDENTS

In terms of GSI appointments, the Department treats students in the Logic and Methodology

of Science Group who are actively working on dissertations under the primary direction of Mathematics faculty in the same manner as its own students. Other GLMS students who are qualified for Mathematics GSI service are given preference over other non-Mathematics students in the allocation of GSI appointments.

MATH 375

A Mathematics GSI must enroll in Math 375, the Teaching Workshop, during the first semester of GSI appointment. Attendance at all class meetings is mandatory. New GSIs should be aware that the initial meeting of Math 375 is generally held during the week before instruction begins. The requirement to enroll in Math 375 applies even to a GSI who has taught previously at another school or in another Berkeley department.

COMPENSATION

There are four GSI salary steps, the criteria for which are described in the [Graduate Division Appointment Handbook](). The Math Department does not appoint students beyond a Step III. Current GSI salary rates can be found [here](). (Note that a standard GSI appointment is 50%; listed salaries are for 100% appointments.)

In certain cases, a student will receive additional funding, sometimes called a "top-off", from the department at the start of the term in which they are teaching to bring them up to their promised level of support that term.

GSI DUTIES

For a list of the specific duties associated with your assigned course, please review Attachment A, which will be sent to you with your ASE Appointment Letter prior to being hired.

WORKLOAD

A 50% GSI position is equated with a 16-20 hour per week workload on average. A GSI who feels that his or her workload consistently exceeds what is reasonable should speak with the Director of Student Services.

Please refer to the [GSI Teaching & Resource Center's website]() for the full policy on appointments and mentoring of GSIs.

RESEARCH, SEMINARS, TALKS AND CONFERENCES

1. Mathematics Department Afternoon Tea and Seminars

Several weekdays during the academic year, the Mathematics Department holds Tea Hour from 3:00 to 4:00 p.m. in 1015 Evans. Faculty, visiting scholars, staff, and graduate students are encouraged to attend. It is a special time when the Department and all of its diverse elements get

together to socialize and/or talk shop. The teas also serve the purpose of preamble for the Seminars which follow, especially larger seminars held in 60 Evans, 4:10-5:10 on many Mondays (the MSRI-Evans lectures sponsored by MSRI) and Thursdays (the Department colloquium).

Daily listings of seminar meetings are posted on the department website and on bulletin boards in the Department. The bulletin board southeast of the main elevator bank holds announcements of mathematics seminars. The bulletin board outside the Graduate Lounge in 940 Evans holds announcements of seminars in the Mathematics Department as well as other departments and institutions. Seminar information is also posted on the Math Department's website.

2. Mathematics Colloquia

The Department of Mathematics sponsors a weekly Colloquium, in which distinguished speakers, some from outside Berkeley and some drawn from the faculty in residence, present recent results in various fields in a manner which is accessible to non-specialists. One of the main purposes of the Colloquium is to provide graduate students with overviews of research in areas other than their own, to broaden their mathematical culture, and give them an opportunity to learn about problems and methods that they may find of use in the future. Graduate students are strongly urged to attend the Colloquium on a regular basis. The colloquia take place almost every Thursday during classes, 4:10 pm-5:10 p.m. in 60 Evans. The current schedule of talks can be found on the bulletin boards on the 9th floor.

3. Mathematical Sciences Research Institute

The Mathematical Sciences Research Institute (MSRI) hosts several workshops and organizes seminars each year. The MSRI-Evans Monday lectures are expository lectures intended to inform the Bay Area mathematical community about current MSRI programs and members. The lecture schedule can be found on the bulletin board outside 940 Evans mailroom. For more information on all other MSRI events, please visit the MSRI website.

4. Conference Funding

The Dean's Office of the Graduate Division has funds to help doctoral students with the cost of travel, if they are giving a paper at a professional conference. Eligible students must be in good standing, be currently registered. Students may receive two of these travel grants during their academic career. More information can be found on Graduate Division's Fellowships page. Graduate Assembly also offers travel grants to graduate students; more information can be found here.

The Department is occasionally able to provide travel funds for students to attend conferences. Interested students should inquire of the Vice Chair for Graduate Affairs well in advance of the conference if the aforementioned two funding sources are unavailable.

Mathematics Opportunity Committee

The Mathematics Opportunity Committee, through outreach, admissions, financial support, and

academic advising and support, provides opportunities for graduate study at Berkeley for students who have demonstrated exceptional mathematical promise despite having encountered in their earlier education limited resources or other circumstances that may have affected their preparation

1. Preliminary Exam Workshop

The MOC runs workshops aimed at boosting students' preparation for the Preliminary Examination (see Prelim section in "Ph.D. Requirements"). These are open to all students in the Department. Though they are designed for students with uneven undergraduate backgrounds, many students with strong preparation also find them to be valuable.

2. Tutoring

The MOC, if requested, will try to arrange tutoring for graduate students experiencing academic difficulties.

3. Other Activities

An important function of the MOC is to foster communication and camaraderie among students and between students and the committee. MOC activities include a social/informational reception every semester, and a bulletin board outside 1015 Evans which displays information of interest to students. Suggestions for new activities or involvement in ongoing programs are always welcome.

Graduate Admissions Committee

The Admissions committee consists of several Mathematics faculty members and the Vice Chair for Graduate Affairs. It conducts the first and second rounds of the multi-level evaluation process for applications for admission to the program(s). This committee also selects continuing students for awards of departmental fellowships. These fellowships are awarded for Spring semester, provided that sufficient financial resources are available, via a competition held in Fall.

Please refer to the embedded links for a full list of [faculty committees](#) and [assigned duties](#).

Student Groups

1. The Mathematics Graduate Student Association (MGSA)

The Mathematics Graduate Student Association is a student-run organization whose purpose is to promote and organize activities that will bring together its members, and allow them to discuss mutual concerns as well as to meet other members of the Mathematics Department. It also seeks to represent graduate mathematicians by relaying their concerns in the appropriate direction.

Any Berkeley mathematics (or logic) graduate student is automatically a member and may vote in elections for officers at the end of the Spring semester.

For more information and comments, please contact the current MGSA officers by emailing mgsa@math.berkeley.edu or visiting the MGSA website.

2. The Noetherian Ring

Founded in 1991, the Noetherian Ring is a group of graduate students, postdocs, and professors who identify with gender minorities in Mathematics.

The goal of this group is two-fold. One is to indicate a presence of gender minorities in the math department and provide information for students potentially interested in pursuing mathematics. The other is to provide a network for gender minorities in the UC Berkeley math department and facilitate Nring activities.

For more information and comments, please contact a Noetherian Ring representative by emailing nring@math.berkeley.edu or visiting the Noetherian Ring website.

3. Unbounded Representation

Unbounded Representation (URep) is a graduate student group within the Department of Mathematics that promotes dialogue about the different kinds of diversity in the math community. One of their goals is to assess the diversity-related climate of the Math graduate student program and develop programs that support Math graduate students who come from traditionally underrepresented groups, as well as the wider community of Math graduate students.

Protocol

1. Photocopy Room Policy

The Mathematics Department photocopy facility is provided only for official departmental business. Under no circumstances is the duplication of materials of a personal nature allowed.

The following Mathematics Department personnel are authorized to use the photocopy facility:

- Administrative Staff

- Faculty

- Graduate Student Instructors

- Graduate Student Researchers

- All other Graduate Students in good standing

To obtain a key to the photocopy room, please see the Building Coordinator.

2. Posting Fliers

Students, faculty, visitors, or staff within the Mathematics Department wanting to post mathematics-related notices may do so on the bulletin boards located by the 7th, 8th, and 10th floor elevators. For 9th floor and other bulletin boards, check with the front office in 970 Evans.

3. Obtaining Keys

When students are assigned a new office or desk, they may obtain keys from the Building Coordinator. You will be required to return any old keys. ID Card access to Evans Hall is also coordinated by the Building Coordinator.

4. Math Department Policies and Procedures

For a comprehensive outline of the Math Department's current policies and procedures, please see here.

5. Emergency Evacuation Instructions

For our up-to-date Emergency Plan, please refer to this living document.

Here are general guidelines on evacuating Evans Hall in an emergency:

• Remove personal belongings, exit office and close door behind you. In case of bomb threat, do not turn off lights or equipment.

• Assist disabled persons in your vicinity with exiting the building or finding refuge in an office with a door.

• Exit the building by the nearest stairway. Do not use the elevator. The goal is to have the building completely evacuated in 5 minutes or less. Note that it is illegal to remain in the building after the alarm sounds. Failure to exit will be reported to the police when they arrive and could result in a fine.

• If you have information regarding the cause of the alarm bell sounding, report immediately to your Roll Taker at the Evacuation Assembly Area (Lawn area). Look for your floor sign and report to your Roll Taker to check-in.

• Wait until proper notification to re-enter the building even after the alarm bell stops. The Assembly Area Point of Contact will signal when the building is ready to occupy.

• Additional note concerning earthquakes: In the event of a major earthquake, the general rule is to "Duck, Cover and Hold" until the shaking stops, then evacuate the building. The alarm will not sound unless there is a fire or release of hazardous substances. In a minor earthquake, occupants may re-enter the building. In a major earthquake, occupants should stay outside until the building has been checked by a structural engineer.

Helpful Information & Resources

BearWALK Service

After dark, radio-equipped and trained student employees of UCPD, Community Service Officers (CSOs) provide a walking escort in conjunction with the Night Safety Shuttle to nearby residences, public transportation or parking facilities during the evening hours. BearWALK Hours of Operation Service hours are from dusk until 2 AM with the last call taken at 1:45 AM. Dusk usually begins at 7:30 PM during daylight savings time, 6 PM at other times of year. Call 642-WALK (9255) 15 minutes before you need the escort (more advance reservations not accepted.)

Warn Me:

WarnMe is UC Berkeley's alerting and warning service for students, staff, and faculty. It is activated to contact you when there is an immediate threat to safety or health affecting the campus community. WarnMe can alert you by phone, text message, or email — you choose the best ways to reach you. (https://warnme.berkeley.edu/)

Helpful websites:

Residency: http://registrar.berkeley.edu/Residency/legalinfo.html

University Health Services (Tang Center): http://www.uhs.berkeley.edu/index.shtml

Graduate Division Forms: http://www.grad.berkeley.edu/policies/forms.shtml

Teaching: http://gsi.berkeley.edu/

Fellowships: http://www.grad.berkeley.edu/financial/deadlines.shtml#extramural

Graduate Assembly: http://ga.berkeley.edu/

International Students BIO (Berkeley International Office): http://internationaloffice.berkeley.edu/