UC Santa Cruz Mathematics Department

TEACHING ASSISTANT MANUAL FALL 2018

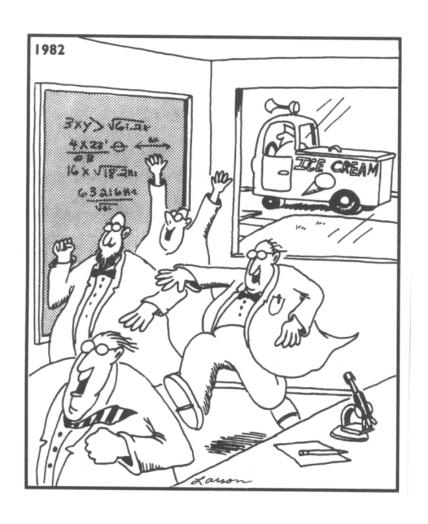


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I. Important Information

A) Expectations

All TAs are expected to hold section and office hours. Other duties vary by course and instructor and may include some or all of the following. At the very beginning of each quarter, the instructor and TA must review and complete the **Notification of Duties form** detailing performance expectations (see Appendix below). The form is then returned to the Graduate Coordinator. Proper and professional behavior is an implicit duty. TAs are paid to work 20 hours per week, averaged over 12 weeks (220 hours per quarter). This is an overview; details may be found in part II of this manual.

Hold Sections: These meet once or twice a week at times and locations found in the Schedule of Classes. Your section assignments are determined at the TA training at the start of the quarter. Usually you help students with homework and exam preparation. Sometimes you keep track of attendance. For more information, see section II.A below.

Hold Office Hours: Most TAs hold at least 2 hours of scheduled office hours per week. You choose the days, times, and location, which should be coordinated with the instructor and other TAs. Most are held in McHenry 4112 or 1261, and are scheduled via Google Calendar. See section II.B below.

Quizzes: You may need to write, administer, and grade quizzes, as well as keep track of scores. Sometimes this is coordinated with other TAs for the course.

Homework: This may include collecting and returning of homework and keeping track of scores. If homework is online, you must become proficient with the system. Discuss grading expectations with the course instructor and be sure they are recorded on the "Notification of Duties Form."

There is a lateral Homework File Cabinet on the first floor. Students can leave their homework for pick-up by the Instructor or TA in the file folder labeled for the class. The cabinet cannot be used to return student homework. The cabinet is considered a public space, and leaving graded material there is a violation of FERPA law. Further information regarding FERPA can be found here:

http://registrar.ucsc.edu/records/privacy/

It is best to schedule time for returning homework to students in class or section.

Proctor Exams: You may be asked to help administer exams in the classroom or supervise DRC students.

Grade Exams: You may be asked to help grade exams in a timely manner, often with other TAs and the instructor in marathon sessions the night of the exam.

Solutions: Sometimes you will be asked to provide solutions to homework assignments, quizzes, or exams.

Meetings: Some instructors require weekly meetings with their TAs.

Email: Check regularly for emails from the Department, instructor, other TAs, or students. Reply promptly.

Review Sessions: You may be asked to hold pre-exam review sessions for the whole class or your students outside of your regular sections. Room scheduling is more difficult so it is important to make room requests from the Department early in the quarter.

Website: Check the course website regularly for changing assignments, due dates, etc.

Lecture Attendance: Some instructors require lecture attendance. Few discourage this.

B)Phone Numbers

Most numbers below are given in extension format (i.e. x0000), which translates to dialing 9-0000 from an on-campus phone and (831) 459-0000 from an off-campus phone. Also remember that calls from an on-campus phone to an off-campus phone number need to be prefixed by a 6.

Department Contacts and Numbers

Mathematics Front Desk	Gina Hernan	x2969
TA Trainer	Pedro Morales	x4841
Head TA	Charlie Petersen	chanpete@ucsc.edu
Graduate Vice Chair	Robert Boltje	x2218
Graduate Program Coordinator	Jen Correia	x5461
Department Manager	Michelle Dohl	x4369
Department Chair	Viktor Ginzburg	x3711
Undergraduate Vice Chair	Frank Bäuerle	x2718
Undergraduate Advisor (Math)	Ben Fisher	x1040
Mathematics Student Workers		x2400
Math Graduate Office	Room 4117	x4100
Math Graduate Office	Room 1266	x4886
Math Graduate Office	Room 1292	x3158

Non-Departmental Numbers

Emergency	911
Counseling and Psychological Services	x2214
Disability Resource Center (DRC)	x2089
ITS Computer Support	x4357
Health Center	x2211
Science Library	x4000
Sexual Harassment (Title IX)	x2462
Suicide Hotline (24 Hours)	(831) 458-5300
UC Police	x2231
UC Fire Department	x2342

C) Websites

Logistics

UCSC Math Dept

https://www.math.ucsc.edu/graduate/taships/index.html

https://www.math.ucsc.edu/about/quick-links-info/facultyhdbk.html

UCSCTA Handbook: located in the TA Resources – Everything You Need to Know section

https://graddiv.ucsc.edu/current-students/pdfs/ta-handbook.pdf

UCSC Schedule of Classes

https://pisa.ucsc.edu/class_search/

UC Human Resources (benefits, contract, policies)

https://ucnet.universityofcalifornia.edu

atyourservice.ucop.edu

UCSC Health Center

https://healthcenter.ucsc.edu

UCSC Employee Assistance Program

https://shr.ucsc.edu/benefits/eap/

UCSC Disability Resource Center

https://drc.ucsc.edu/

<u>UCSC LSS (Learning Support Services) Math Tutoring</u>

https://lss.ucsc.edu/i-want-to/attend-dropinmath.html

Teaching

<u>UCSC CITL</u> (Center for Innovations in Teaching and Learning) Teaching Tips

https://graddiv.ucsc.edu/current-students/teaching-resources/techniques-ta.html

UCSC CITL Instructional Resources

https://graddiv.ucsc.edu/current-students/teaching-resources/resources-ta.html

Math Forum

https://www.nctm.org/mathforum/

D) Student Resources

While your students' primary resources are the instructor and TAs, there are many other places to find math help on campus. For those students who need more time than the TA has, and for those who cannot make office hours, and really for anyone else, the following services are freely available:

Modified Supplemental Instruction: MSI can be described as course-specific drop-in tutoring, available for some lower division math courses.

https://lss.ucsc.edu/programs/modified-supplemental-instruction/

Learning Support Services Tutoring: LSS offers tutoring for most math courses. Students must sign up online and must attend one hour per week.

https://lss.ucsc.edu/index.html

ACE: This is a PBSci Division sponsored program whose mission is to increase the number of majors in math, science and engineering for underrepresented students through collaborative group learning discussions. Students must apply before the quarter begins.

https://ace.ucsc.edu/

The following websites may also be useful to your students:

wolframalpha.com

mathworld.wolfram.com

https://mathcoach.sites.ucsc.edu/

http://www.shsu.edu/dept/counseling/test-anxiety.html

E) Disability Resources for Faculty & Students

Some students require extra accommodations to have the same chance to succeed as everybody else in the class. It is not your task to diagnose whether or not a student has a disability. This is done by the Disability Resource Center. If a disability is diagnosed, the student receives a sheet with detailed specifications for the extra assistance required.

Students with disabilities who require accommodations submit an "Accommodation Authorization Letter" to the instructor of each class, in each quarter. Disability-related information and affiliation with the DRC are confidential matters protected by FERPA guidelines. It is therefore important not to identify DRC students or acknowledge individual requests for accommodations in public. In order to protect their confidentiality, students often submit these letters to instructors during office hours or by appointment. You must make a reasonable effort to provide the specified accommodations (it's the law). Typically, this involves extra time on tests, and/or a separate, quiet room for tests. Consult with the instructor.

Additional information for faculty and staff can be found on the DRC website: https://drc.ucsc.edu/index.html. If you have any questions about a student's letter or accommodation, please contact the DRC at 831-459-2089 or email drc@ucsc.edu.

Students are told to arrange their testing accommodations directly with PBSci Testing Support. Coordinate exam drop off and pick up with PBSci Testing Support, testing.pbsci@ucsc.edu. Their office is located in JBEB Room 147. PBSci Testing Support will no longer print exams. If you have any questions about DRC accommodation requests, please contact testing.pbsci@ucsc.edu in PBSci.

Resources:

https://drc.ucsc.edu/faculty-and-staff/fac-staff-fag/index.html

http://www.math.ucsc.edu/about/quick-links-info/facultyhdbk.html#drc

https://undergrad.pbsci.ucsc.edu/resources/testing-support/index.html

F) Sexual Harassment and Title IX

In recognition of federal government regulations and UC system wide guidelines, all graduate students are required to complete an online sexual violence/sexual harassment prevention training. There is now one comprehensive online training for graduate students. The student training, created by Campus Clarity, is called "Think About It: Graduates" and is administered by the Title IX Office. Graduate students must complete the online training each academic year.

If you completed a training last year, you are REQUIRED to complete it again this year. UC Santa Cruz wants to ensure that all students are aware of the resources available to them, and repeated trainings were found to benefit retention of the material and reduce the occurrence of harassment in the community.

To access the online training go to www.campusclarity.com and click "Login to Training." Use your UCSC email address to register. If you have already registered and have forgotten your password, click "forgot password" and follow the directions. For technical support email ccsupport@everfi.com or call 800-652-9546.

In addition to the online training, all incoming graduate students are required to complete an in-person Title IX training upon entry into UC Santa Cruz. This is usually done during Graduate Student Orientation.

Please visit the Title IX website for more information: https://titleix.ucsc.edu/index.html

G) Evaluation and Further Training

At the end of each quarter, students at UCSC are asked to evaluate their instructors and TAs. Instructors also evaluate their TAs. A new online evaluation system is being implemented beginning Fall 2018. Past evaluation forms can be found in the Appendix. These evaluations are read by the Chair, Graduate Program Vice Chair, Department staff and the TA trainer, and play an important role in future TA assignments. A graduate student is not going to lose a TAship because of poor evaluations from one quarter, but persistently weak evaluations and no effort on the part of the TA to improve, are certain to result in the loss of the financial support of a TAship.

Most graduate students are good TAs at first and tend to improve with experience as they get used to the dual role they must play—as both a TA and a student. Each position has its own expectations and authority. Keeping up with all that is required can be a delicate balancing act. To stay on top of things, try to remain aware of whom to turn to for help. TAs work for a professor, under the general direction of the Graduate Advisor while reporting to the Graduate Vice Chair. It can be tricky, but should get easier with time. If there are problems with keeping up with the work load, **talk to the instructor immediately** and discuss modifying the workload. The Graduate Advisor and Graduate Vice Chair are also resources for helping to mitigate workload issues.

II. Teaching

A) Sections

As a TA, you will likely spend most of your time teaching sections. Different TAs may have very different teaching styles, and you may have to modify your technique for each particular group of students. You should always ask if the instructor has particular requests for how sections are run. Here we compile some ideas and general advice you may find useful.

Most sections are once per week for 65 minutes.

Lower-division courses

There are usually a plethora of problems to cover in the time allocated. A typical section might include:

- A 10-minute quiz covering the week's topics.
- Two or three problems from the homework (or similar to the homework) covered in detail, prepared beforehand by the TA.
- Some time to answer direct questions from the student. As the quarter progresses and
 the students develop more of a rapport with the TA, they will naturally ask more
 questions, so the TA may not need to prepare specific problems.
- Homework lab where students work independently or in groups and the TA hovers, giving hints and checking progress.
- Student presentations at the chalkboard of problems from homework, quizzes, or exams.
- A 10-minute review of the big ideas (formulas, definitions, theorems) from the week's material.

Upper-division courses

More time is expected for preparation in these classes, since students face fewer but more challenging problems than those in the lower-division courses. Some of the problems are quite difficult, and it takes some careful thought to come up with a clean, straightforward solution! Conscientious preparation on the part of the TA is crucial. However, experienced TAs find that the sections are most effective when the students themselves are actively engaged, asking questions and letting the TA know what's missing in their understanding of the material. In a typical upper-division section, there may be:

- Time devoted to presenting key examples.
- o Time for answering homework questions.
- Some group work (students working on or presenting solutions of different problems to each other).

The first day of section

Much of what you do in the first section depends on which class you are assigned, who the instructor is, and your own teaching style. The first section is always extremely important; what you do during that first day will set the students' expectations and the tone of the section for the rest of the quarter. Listed here are some general things to consider doing in the first section:

- Write the name of the class, the instructor's name, your name, your email address, your office location and phone number, and your office hours and location on the board, preferably in a place where you can leave it up the entire section time. It's a good idea to do this even if you have a handout with all of this information on it. There are always students who show up late, wondering if they're in the right place and what's going on.
- Know the other section times and locations for the course, as well as the office hours of the instructor and other TAs.
- Pass around a sign-in sheet for your students. This will help you learn the names of your students.
- Announce that students with learning disabilities who will need special accommodations (such as extended time on tests/quizzes) during the quarter must talk to the instructor and possibly you outside of class in the first week or so of the quarter. Don't ask them to come forward in class; it is a breach of confidentiality. Let them know it is their responsibility to contact the DRC (Disability Resource Center) early in the quarter to make the necessary arrangements in a timely manner.
- Tell the students what resources are available to them besides the instructor and TAs. See section I.D above.
- Tell the students what you will expect of them in section and office hours so they will come prepared to work and learn. Be very clear about due dates for homework, late homework policy, the students' responsibilities in the course, etc., in the beginning.
- If you don't make your boundaries clear from the start, you will have students abusing your time and good graces as the quarter goes on, especially when they get stressed out around midterms and finals.
- Try to develop a rapport with your students. One section isn't going to make you best buddies, but there's a lot you can do to break the ice and make your students feel you are accessible to them and on their side. Sometimes talking about your mathematical specialty or interests (mathematical or otherwise) can help students see you as a real person like them, instead of just an appendage of the university. Enthusiasm, humor, and showing the students you're really glad you're their TA for this course are all steps in the right direction.

Suggestions on how to encourage student participation

• Start each section with a prepared list of questions and have students work on that as the first thing. You can take roll or hand back exams or homework during that time.

- Arrive early and chat with the first few students to arrive, about the lecture, how the class is going, etc. Do the same after class.
- Find out what excites and worries the students. Early in the class, ask them what topics and problems they are most interested in. Go over the list as a group. Combine items; identify those of concern to most students. At the first section meeting encourage everyone to say something so that people don't feel irrelevant. Deal with every item in the list in some fashion.
- Make lots of eye contact. Try to exchange glances, smiles, and so on with students and don't just stick to the most responsive students; seek contact with those who have participated less as well.
- Be alert to non-verbal cues of interest or readiness to speak, and call on those who look ready.
- Get to know the names and individual interests of students, and refer to them in class when the opportunity arises. Example: Isaac, if you want to be a physics major, then you need to get those integrals down.
- Learn to really wait after a question. Waiting is a signal that you really do want participation. It gives students time to digest the question, ensures that most students will be thinking during the pause, and provides more openings for those hesitant to respond.
- Ask plenty of questions that are pitched at the level most of the class can handle. Success is a powerful encouragement for future participation.
- When you are having trouble explaining a problem, open it up to the class, and ask if anyone else can clarify. Be a model for honesty about your own uncertainties.
- Be hospitable to students' questions or comments that surprise you. These may be signs that you haven't understood their concerns.
- Be clear and positive in rewarding all participation. Students will watch what happens to
 others who speak up, and this expectation affects participation enormously. When you
 must be critical, do it in a way that doesn't alienate.
- Ask students regularly whether they follow you.
- Vary the intellectual approach of your questions to provide opportunities for different types of students: include some straightforward questions, some requiring deductions, some asking for hunches or intuitive leaps, etc.

B) Office Hours

Typically, a TA will hold at least 2 office hours a week, where students can come and ask specific questions that they've been stuck on that week, or get another explanation of something that they didn't understand in class or were too embarrassed to ask in front of the entire class, etc.

Most TAs hold office hours in McHenry 4112 or McHenry 1261. You have been provided with

access and may schedule your office hours using the Google Calendar associated to your UCSC email account. Instructions are included below. You may also hold your office hours in public places like libraries or cafes on campus. Do not use the graduate offices for office hours in respect of your colleagues.

The TA should schedule office hours carefully - it can be a delicate feat to have office hours at a time that students can make; once that is accomplished, an even more delicate task is to have them at a time they **will** make. Here are some suggestions on how to have students show up:

- Attend some lectures, and talk with the students before or after the lecture. This is particularly worthwhile in upper-division courses. The students are much more willing to go to office hours and/or section if they simply know and have some level of relationship with the TA.
- Ask the students to come! This crazy idea is based on an observation: many students think that they are wasting the TAs time by asking questions that they should already know, and they end up being too embarrassed to come. Tell them that this is what office hours are for, that it's ok to not understand everything in lecture. Remind students of your office hour times and locations regularly in section.

Accessing Google Calendar

You may access your Google Calendar two ways:

- http://its.ucsc.edu/calendar/ (bookmark this link)
- Via email at: http://email.ucsc.edu (click on "Calendar" on the top banner)

Login with your **CruzID** and **Blue password** (same password you use for email). ITS recommends that you always access your UCSC Google Calendar via a secure web browser such as Chrome, Safari, Firefox, or Internet Explorer.

Information regarding Google calendar can be found at:

https://its.ucsc.edu/google/calendar.html

https://gsuite.google.com/learning-center/products/calendar/#!/faq

C) Homework, Grading, and Review Sessions

Online Homework

In many lower-division courses such as Math 2, Math 3, Math 11AB, Math 19AB and Math 22, on-line homework is used. The system being used depends on the course, but is typically specific to the textbook. That is, in most cases the assigned problems in the on-line system are electronic versions of problems from the textbook. There may also be additional features in the system that students might use. In any case, if you are a TA for any of these courses, contact the instructor for details on how to get access to the homework assignments and students' work. You may also be asked to help with administrative tasks related to homework such as creating homework assignments or dealing with student questions. You should get comfortable with the system early on, as many students will have technical questions about the first assignment.

Paper Homework

Unfortunately, the department can no longer hire undergraduate graders, aka readers, to grade student homework. One of your jobs as a TA may be to collect the students' homework, grade and return it to the students. If this is the case, you may be the one who must determine the details of the homework policy for your sections. If there are multiple TAs for the course, you may need to collaborate. Always check to see if the instructor has a preferred policy. Some of the questions you may have to consider are:

- Where will the students turn in the homework?
- Where and when can the students pick up their graded homework?
- Where and when will the graded homework be returned?
- Under what, if any, circumstances will you accept late homework? How late? If the homework is late, how much credit will the student receive?
- Should the students write their section time/place and their TA's name at the top?
- Will you require the papers to be stapled with the problems in order?
- Will you post solutions to the homework? If so, when and where will you post them?
- If there are multiple TAs, will they rotate grading different sections?

You should keep in close contact with your instructor in order to make sure homework expectations are being met and to keep tabs on which problems your students are struggling with.

Grading

Fairness and consistency are the most important things about grading. There are differing opinions as to how to assess partial credit. Sometimes it is very hard to decide if/what amount of partial credit is appropriate. To save time and be efficient it is a good idea to work the exam yourself and think about partial credit before grading. Consult with the instructor on his/her grading emphasis and preferences. It is better for consistency to grade one or two problems at a time rather than the whole exam.

Be able and willing to explain the grading scheme and reasoning for partial credit to your students. Students have a right to know how they are evaluated. On the other hand, once you have decided on a particular grading scheme, stick to it and do not let the students haggle over points. Obviously, it is possible that a mistake in grading was made, and if you notice this, you should re-grade the exam/problem. Also encourage your students to count their points. If a student is clearly trying to wean points from you without any justification, then you should calmly explain to the student why he/she doesn't deserve more points. If they persist, then send them to the instructor.

Review Sessions

The function of a review session is not to have everyone learn the quarter's worth of work in three hours. The function of a review session is to have the students consolidate the various bits of information that they've picked up over the past several weeks, to pick over the tools and skills that they've acquired, and hone these skills and sharpen these tools for the coming exam. A good way to set that up is to make up a sample midterm or final, and ask them to work on the problems before coming to the review session. Ask them to come prepared to solve all of the

problems. Ask them to definitely come to the review session, even if they know how to do all the problems.

Another thing to remember, especially in the lower-division courses, is that you are part of a team of TAs. Therefore, it is a good idea to strategize when taking on the extra duties that come up around a midterm or final. Get with your teammates and parse out tasks. This method can promote consistency in the course and therefore benefit the class as a whole. In addition, room space on campus is extremely limited. This way, instead of spreading your resources thin for six small reviews, you can consolidate and hold one or two larger, more streamlined prep sessions.

To book a review session room (review session larger than your scheduled section) please use the form: https://www.math.ucsc.edu/about/quick-links-info/admin-forms-info/classroom-rsvp-form.html. Lack of classroom space makes scheduling review sessions difficult. Schedule sessions several weeks in advance or there may not be a room available.

D) Troubleshooting

Here are some common issues that may arise during the quarter and what to do.

1) Where do I get a textbook or solutions manual?

You may check out textbooks from the Mathematics Department. Keep in mind you are only "borrowing" the text for the particular quarter in which you have it checked out. You are responsible for returning it once the course ends and will not be permitted to check out any others until it is returned and acknowledged.

2) My section is too large for the room.

Do the best you can during the first section and then go to the Mathematics Department office and speak with the Graduate Advisor who will try to get you another room.

3) I can't make the section time I was assigned.

It is your responsibility to work out conflicts with the Head TA and other graduate students. Prior to the beginning of each quarter there will be a time set aside for all TAs to get together for the purpose of working out scheduling. If something in your schedule changes, contact the Head TA immediately. Note that changes for personal reasons cannot be accommodated.

4) I need a room for a review session.

Fill out a room request form available at https://www.math.ucsc.edu/about/quick-links-info/admin-forms-info/classroom-rsvp-form.html or speak with the Graduate Advisor in McHenry 4111 to schedule review session rooms. You will need to supply the course number, the number of students expected, when you would like the room, and what the room is for. You should receive an e-mail that confirms your reservation and authorizes you to use that room at that time. Alternatively, if there is enough space, you may schedule McHenry 4112 or 1261 via Google Calendar. (See section II.B above.) There is no guarantee that there will be classroom space available for review sessions.

5) My section room is locked when I get there for section.

If the room is a Department classroom, use your Common Key. If the room is controlled by

the Registrar, call the campus police at 459-2231. They will make sure the room gets opened as soon as possible. If you get locked out on the weekend, you will need to show them your authorization e-mail (best to print a copy beforehand); they might not let you in without it.

6) My section room has another class meeting in it when my section is supposed to be there.

Tell the Mathematics Department Graduate Advisor at 459-5461. In the case that the room is under the control of the Mathematics Department, they can tell you right away who is supposed to be there. If the room is reserved for your section, you have the right to ask the other class to leave. In the case that the room is controlled by the Registrar, they will call the Registrar and work things out.

7) I need a place where the students can turn in their homework.

Ideally, you should collect and give back homework in section. However, we've found that having a secondary option works to the benefit of both the TA and the student. If you choose to allow students to turn in their homework outside of section, you may have them utilize the homework file cabinet on the 1st floor of McHenry near the classroom McHenry 1240. For your convenience, we have set up file cabinets and files, clearly labeled, for all of the Math courses that do not make use of online grading. There are "turn in" folders available; however, homework cannot be "returned" via the homework cabinet due to the federal Family Educational Rights and Privacy Act of 1974 (FERPA), as amended, which is intended to protect the student's right to privacy. You are responsible for making sure your students and readers are aware which lettered sections are yours (for example, are you the TA for 11A-01B or 11A- 01F). You will also need to decide on and communicate with each party the drop-off and pick- up times. Do not write on or alter the folders in any way, as they need to translate into future terms. If you would like to put additional information on your folders, like your name and section times, please put it on a 3x5 card and attach it to the folder with a paper clip.

8) I need a place to put graded final exams where the students can pick them up.

Don't. This violates privacy laws. You can store them locked up in your office but they must be locked and not visible to other students and distribute at office hours, or you can take the tests to section or class (or ask the instructor to do so).

9) I need chalk (colored or regular) or white board markers.

The chalk and the white board markers are kept at the Mathematics Department office in McHenry 4111 or in the supply cabinet located in the computer lab McHenry 4170. If you need other supplies, ask the staff at the Mathematics Department office for assistance.

10) I need to make copies for section.

Print vs Copy: a printout is done directly from a computer; a copy is made from the original printout using the machine in the hallway. DO NOT PRINT MORE THAN ONE ORIGINAL. Use the copier for making multiples – this saves the Department a lot of money.

The copier requires a login with an associated financial account. If you would like to make copies, please make arrangements with the course instructor.

11) I am sick and will not be able to make it to section.

If you fall ill and are unable to make it to section, you must call the Graduate Advisor, at (831) 459-5461. While we are aware emergencies come up, in all other cases, we ask that you let us know as soon as possible (and at least a half hour before section start, if possible) that you will not be coming in. This is so that we have enough time to either find a replacement or cancel the section and inform the students. A no call/no show, is unacceptable.

12) I need to take some time off.

If you need to take planned time off during the quarter, for personal or academic reasons, you are responsible for covering your sections. You will need to come into the department office and get a "shift coverage" form from the Graduate Advisor that must be signed by all relevant parties, i.e. you, your replacement, the instructor etc. Keep in mind your stand-in is subject to the department's approval. It is the expectation that you solicit the help of another Mathematics graduate student when looking for section coverage. You are not permitted to take time off without following this procedure. If you do, it will be considered a no call/no show and disciplinary action will follow.

13) I need to get information to students.

If you want to email your material (announcements, assignments, solutions, etc.) you can use the class roster – see next question. Alternatively, if there is a course webpage, contact the instructor about posting material. Or, if you have a personal webpage, you can post material there.

14) How do I get a class roster for my students?

Go to my.ucsc.edu and login. Click Main Menu > Faculty Center (Grading, etc.) > Search All Class Rosters. From here you may search for the entire class roster for your course, or just your sections. Rosters include all email addresses, and you can send emails from the roster by clicking Notify Selected Students. You can also download the roster into Excel. See the Graduate Coordinator for help. You can also create a google group from your roster that you download into excel. Google groups allow you to made a list of those students that you want to contact regarding section changes, study guides, office hour changes, etc.

15) A student is cheating.

It is the instructor's responsibility to decide what to do about cheaters, not the TA's. There are, however, several strategies you can use while proctoring an exam or quiz that help to discourage cheating. For example, make a general announcement before the exam or quiz to the effect that cheating will not be tolerated; spread the students out so there is an empty seat or two between students, if possible; walk around the room and look at people. If you notice suspicious behavior like wandering eyes, make eye contact with that person and let them know that their behavior is not acceptable. If you catch a cheater red-handed, gather what evidence you can (cheat sheet, etc.), make a note of the student's name and tell the instructor. In the case where you notice two exams are suspiciously similar, make copies of those exams and tell the instructor. A good motto is: Minimize the potential for cheating, be clear on the consequences, and follow through if you catch somebody.

16) A student is complaining excessively.

Excessive complaining is preventable before it begins by setting high standards for the students on the first day of section. It's far easier to begin with strict guidelines and relax them as the quarter goes on than the other way around. Students will complain when they think they can get away with it. That said, you may encounter some whining anyway. In this case, talk to the student outside of class about their grievances. Remain calm and firm while listening attentively to the student. Make it clear where your boundaries are, what you will and will not do, what behavior is acceptable and what is not. If you still have trouble with the student, discuss the matter with the instructor of the course.

17) A student is monopolizing the discussion.

Encourage lively discussion in your section, but sometimes a student will monopolize the discussion. The tricky thing is to encourage the participation of the rest of the class while getting the "red-hot" to stop talking. A good strategy for this is to ask for participation from the other class members up front. For example, you could say something like, "I want to hear from someone who has not spoken in class today."

18) I need teaching advice.

You have many resources where you can get advice about teaching:

- The instructor of the course
- The Head TA
- Other TAs
- Other faculty members
- Websites from section I.C above

Usually all of these people are very glad to help.

III. Appendix

Fact Sheet for TAs

- 1. TAs must be registered and enrolled graduate students. Full-time students are eligible for a full (20 hrs/wk) appointment (220 hours in a quarter); part-time students (enrolled in 8 credits or less) are eligible for a maximum 10 hrs/wk appointment (110 hours in a quarter).
- 2. General information for Teaching Assistants is available in the department handbooks for graduate students, and on the Graduate Division website: https://graddiv.ucsc.edu/current-students/grad-student-employment/index.html. The ASE/UAW contract governing student academic employees is available at: https://ucnet.universityofcalifornia.edu/labor/bargaining-units/bx/contract.html.
- 3. Ideally, 30 days prior to the beginning of the quarter, you should receive a Notification of Teaching Assistant Duties form for each course to which you are assigned. Prior to the start of the course, your faculty supervisor should discuss the assigned duties and answer any questions you may have. The form should be completed and signed by both of you and submitted to the Graduate Advisor.
- 4. In some weeks, TAs may be asked to work more than the average number of hours per week for their appointment. These somewhat heavier weeks will be balanced by correspondingly lighter weeks. The TA appointment continues up to the day that course reports are due to the Registrar, which is slightly after the end of the quarter.
- 5. TAs may <u>assist</u> with, but are not responsible for, the instructional content of a course, the selection of student assignments, the content of exams, and determining student grades. All work assigned to the TA must be <u>directly</u> related to the course to which they are assigned.
- 6. You must notify the supervising faculty member as soon as possible if you must miss a class meeting or lab section, even if you have arranged for a replacement. Such substitutions should be approved by the supervising faculty member in advance.
- 7. TAs must promptly return the assignments they have graded. Delays make lesson planning and the scheduling of examinations extremely difficult.
- 8. BOTH the faculty supervisor and the TA are responsible for regular communication and coordination of the course throughout the quarter.
- 9. If you believe that you are being asked to do work that is the faculty supervisor's responsibility, being asked on a regular basis to work more than the weekly hours of your appointment, or not receiving adequate supervision, then you should raise those issues with the faculty member. If problems are unresolved, please consult your department chair or Graduate Advisor in the Department Office.
- 10. TAs are responsible for promptly notifying their supervisors when they perceive they might exceed the assigned workload maximums. The faculty supervisor must immediately respond to the TA in writing (e-mail is acceptable) to address workload concerns. If your faculty supervisor determines that you have exceeded or will exceed your maximum workload hours for the quarter, they must notify you in writing as to whether your appointment will be increased, or your workload will be adjusted or decreased.

Division of Physical and Biological Sciences NOTIFICATION OF TEACHING ASSISTANT DUTIES

NAME T/A: Department of Mathematics (To be completed by the Faculty Supervis	
Course # Course Title: Qtr/YrInstructor:	
Location:Day/Time:	
NOTE TO FACULTY SUPERVISOR: Check required duties and fill in info assigned to this course. Meet with TA at the beginning of the appointment your performance expectations in relation to them and to the performance side), including the criteria on the section or lab student evaluation form (the one handed out to student	rmation below as pertains to TA to review these duties and discuss categories under Part I (see reverse
TA understands the kinds of teaching skills that will be assessed.	
Attend all lectures	
Present lectures as assigned by faculty supervisor	
Instruct sections per week (review sample Student Eva	aluation form as noted above)
Hold office hours weekly (provide range of hours)	
Attend weekly or as scheduled meetings with Faculty Superv	isor
Attend weekly or as scheduled meetings with TA Trainer or I	Head TA
Assign students to sections at start of quarter	
Assist in preparation of problem sets/quizzes/exams	
Make copies or prepare printing orders of coursework	
Read, evaluate, and return in a timely manner papers/l	ab reports per student
Read and evaluate examinations per student (fill in or r	efer TA to course syllabus)
Proctorexaminations	
Arrange/attendlabs/field trips/observatory sessions	(circle and provide details)
Assist in the preparation of narrative evaluations and/or make appropriate for students in TA's section(s)Keep records of students in TA's section(s) (e.g., attendance as	se grade recommendations as nd grades)
Assist in grading of homework, midterms and final exams	
Schedule Review Sessions - 1-2 weeks prior to the date you w	rish to have the review session
Perform other tasks as specified (please list on reverse or attack)	ch separate piece of paper)
These job duties/expectations and the performance evaluation criteria discussed with the TA assigned to this course at the beginning of the	a have been reviewed and appointment.
- Instructor/Supervisor Signature/Date	TA Signature/Date

Please return this form to the Graduate Advisor in the Department office (McHenry 4111E).

Department of Mathematics – Evaluation of Teaching Assistant Duties

TA Name:	Class	Quarter
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NOTE TO FACULTY SUPERVISOR: Use Part I, Section 1 below to evaluate the TA's overall performance of assigned duties (based on the front side of this form). Use Part I, Section 2 below to evaluate the TA's overall performance of those teaching skills you reviewed with TA at the start of the appointment (based on the criteria from the discussion or lab student evaluation form). Circle the appropriate evaluation rating (NI = Needs Improvement; ME = Meets Expectations; and EE = Exceeds Expectations) and provide consistent supporting comments. Supervisors are free to use split ratings (e.g., ME for subject matter knowledge and NI for organization of lab section). **Or** complete a narrative- style performance evaluation following Part II below.

Part I. PERFORMANCE CATEGORIES: RAT

Part I. PERFORMANCE CATEGORIES:	RATING and COMMENTS:				
1. Performance of assigned duties as set out in "Notification	Evaluation Rating:	NI	ME	EE	
of Teaching Assistant Duties" (e.g.):					
Completes assignments and meets commitments and					
deadlines (e.g., keeps office hours, returns student work in a					
timely manner, attends lectures, etc.)					
Attends required meetings and / or training sessions					
Interacts effectively and maintains a professional demeanor					
with a wide diversity of individuals and work styles and is					
receptive to feedback					
2. Teaching Skills - expectations to be consistent with	Evaluation Rating:	NI	ME	EE	
discussion or lab student evaluation form, e.g.:					
Has appropriate level of knowledge of subject area and					
related expertise					
Uses information, materials, equipment, and techniques					
accurately and appropriately					
Communicates clearly and accurately both verbally and in					
writing					
Is punctual, prepared, and organized for weekly section(s)					
Is sensitive to and concerned with students' learning process					
and level of understanding					
Deals impartially and with overall fairness when evaluating					
and interacting with students					

Part II. Narrative-Style Evaluation

Complete a written evaluation of TA's performance of those job duties and expectations reviewed with TA at start of assignment as outlined in "Note to Faculty Supervisor" in Part I above (be sure to include TA name, course name and number, and Faculty Supervisor name).

Whether Part I or Part II is completed, faculty s	supervisor and TA should each sign evaluation.
Faculty Supervisor/Date	*Teaching Assistant/Date

^{*}Your signature indicates that you have read the evaluation and that your supervisor has discussed it with you, not whether you agree or disagree with its content. If you wish, you may attach comments to this form. Please return this form to the Graduate Advisor in the Department office (McHenry 4111E).

Teaching Assistant Evaluation

Department of Mathematics

Please complete this evaluation of your Teaching Assistant (section leader). The results provide the Assistant with information to understand and improve performance.

Please take this evaluation seriously, we ask for honesty and constructive criticism.

Name of Teaching Assistant:											
Ç	Last Name			First Name							
Course:	S	Section #		Quarter/Year:				_			
1. I attended section: Never Almost Ne				Sometin	nes	Most A	lways	Always			
2. I attended T.A. office hours:	Never	Almost Nev	ver	Sometin	nes	Most A	lways	Always			
Circle the appropriate answer. If you have no opinion, circle N/A. (Please add comments on the back)											
(1) Disagree Strongly (2) Disagree (3 Not Applicable) Neither A	Agree nor Dis	sagre	e (4) Agı	ree (5)	Agree St	rongly (N/A)			
1. The T.A. was generally well prepared.				2	3	4	5	N/ A			
2. The T.A. was very knowledgeable matter.	in the sub	oject	1	2	3	4	5	N/ A			
3. In presenting new material, the T. organized.	A. was we	ell	1	2	3	4	5	N / A			
4. The T.A. was able to help pick out the more important material dealt with in the course.				2	3	4	5	N/			
5. The T.A. was able to work at assigned homework proble and answer related questions clearly.				2	3	4	5	N/A			
6. The T.A. was able to answer most questions relating to the lecture material.				2	3	4	5	N/ A			
7. The T.A. spoke clearly.				2	3	4	5	N/ A			
8. The T.A. wrote clearly.			1	2	3	4	5	N/ A			
9. Any work graded by the T.A. was dealt with fairly.				2	3	4	5	N/ A			
10. The T.A. showed genuine interest in the academic of their students.				2	3	4	5	N/			

11. The T.A. was generally available for help outside class hours					2	3	4	5	N/ A
12. The discussion section helped make the course more interesting1				2	3	4	5	N/ A	
How would you rate this Section a learning experience?									
Poor	Fair	Good	Very Good	Excellent					
How v	would y	you rate	the overall te	aching effectiveness of	the T.	A.?			
Poor	Fair	Good	Very Good	Excellent					
Comm	nents:								

⁻ Please return this completed evaluation to the proctor or the Mathematics Department (4111 McHenry) -