

V. RELATING TO STUDENTS

The following sections of Rishel's book should also be read at this point.

- “What was that question again?”
- What is a Professional?
- Problems of, and with Students
- Student Types: Who is the Audience?
- Advice to International TAs: Cultural Aspects of Teaching
- ... And Not So Silly Stuff
- Letters of Recommendation
- Case Studies: II, V, X, XI

You should also read the sections in the UCR TA handbook (*The Next Step*) on role conflicts (pp. 12–13), professionalism and personal attributes (pp. 24–26), classroom environment and equity in the classroom (pp. 50–55), classroom logistics (pp. 60–72) and individuals' styles of learning (pp. 72–76) for additional information from a somewhat different perspective.

Generalities

Most of the specific comments can be separated into a few simple categories:

1. *Perspective.* This includes recognizing and accepting differences between yourself and the students, and maintaining the balance between “being friendly and being a friend.”
2. *Communication.* This includes your responsibilities to speak to the students as a class and the need for accuracy, consistency, positivity, organization and confidence.
3. *Consideration.* This includes maintenance of office hours, dealing with absences, keeping your composure, respecting students' rights, and showing fairness and responsiveness to students in a manner consistent with your role as an authority figure.
4. *Self-awareness.* This includes understanding how you tend to operate and trying to view yourself from the students' perspective.

This is an area where informal advice from fellow graduate students can be extremely valuable, and asking other students about these issues can go a long way towards answering such questions whenever they come up.

The most basic rules

We shall now discuss things more specifically. Once again, much of the material is just common sense, but since violations of a few of the precepts can be grounds for dismissal it is important to go through them somewhat explicitly.

1. Your age and interests may lead you to identify more with your students than with the faculty, but the students will view you more as a faculty member rather than a fellow student at the same University. This is one reason for maintaining a professional distance. Although this does not mean that TAs cannot be friendly to students, some boundaries must be respected. These include controversial issues not directly related to your areas of competence (politics and religion are obvious examples) and seeing students on a social basis while they are in a class for which you have direct responsibility. In particular, attempts to date students have the potential of generating sexual harassment charges, and you may be found guilty even if your intentions were good provided others perceived they were not. — In a related vein, your office is *not* your private sanctuary. Items not related to mathematics that could be offensive to students like controversial political or religious materials, suggestive materials, or materials items intended to degrade some group of people should not be in sight. — Frequently students and TAs are on a first name basis, but this is definitely not a rule. One way of clarifying your choice to the students is the way you introduce yourself at the beginning of the term. For example, “My name is Miller,” indicates a preference not to use your first name, as opposed to, say, “My name is Michael Jagger but you can call me Sir Mick if you like.”
2. Maintain a balanced perspective about your students. They might not be as enthusiastic about mathematics or proficient in the subject as you are, but this is definitely not proof of laziness or stupidity. On the other hand, they have the main responsibility for learning the material, so you should not take it personally if the students do poorly even when you go beyond the call of duty to help or motivate them. The need for a balanced perspective is particularly important when fielding questions from students; the sections of Rishel’s book on student problems and “What was that question again?” contain a variety of useful comments about such matters.
3. You are an important avenue of communication with your students. Be sure of your facts so that false information is not circulated. In particular, it is important to know and understand the policies regarding your course. Be very careful about saying, “I assume that ...” It is better to say you will check with those in authority and get back to the students next time. — One important reason for not bluffing your way through uncertainties is that it sets a horrible example for students to follow. If the instructor does this, many students will conclude it is fair and acceptable for them to do so too.
4. You are expected to support the policies established by the Department and your instructor. Of course you have the right to disagree with these policies, but you should enforce them and refrain from criticizing them in front of your students. Similarly, don't criticize the book, the instructor or his/her techniques; on the other hand, if you feel strongly about something, it might be appropriate to mention alternatives to the class. — In general, differences of opinion between you and the primary instructor can tend to confuse students for no worthwhile reason (and leave them dissatisfied with both of you), so unless there is a difference of opinion between you and the instructor on some issue that is major and very important to you, it is probably best to avoid mentioning the divergence of opinions. However, in cases where you feel strongly that something must be said, you could say, “There is a difference of opinion among mathematicians here about how things should be done, and I don't entirely

agree with the approach that the instructor has given. It seems to me that ... However, for the purposes of this class we are going to adopt the approach given by the instructor ...” The key points here are that the instructor is not wrong and your view is not the only correct one. In such cases you should finish by restating the instructor's approach and remind the students that it is the official view for the course.

5. If you have office hours, be responsible about the way you conduct them. This is not a time for friends to drop in and visit or to talk with other TAs at length. Avoid doing things that will give students a message that they should not have come. Don't make comments about a student making mistakes or not knowing something even if he/she has left, for it is likely that another student will overhear you. Be on time and don't leave early even if no one shows up. Cancellation and rescheduling of office hours are strongly discouraged. In cases where cancellation is unavoidable, post a big note on your door and inform the Department office of the cancellation. If you can find a substitute, that is great, but you should still let the Department know, among other things to have a record in case of student complaints. Also inform the course instructor. It is very risky to assume that telling your students of a cancellation or substitution during class is sufficient. — Accessibility by electronic mail is often very convenient for both you and the students, eliminating the need for many office visits and phone calls and allowing each of you to communicate efficiently without the frustrations of trying to reach each other or catching one another at a bad time.
6. Act responsibly in cases when absence from class is unavoidable. Emergency situations such as illness or transportation delays (*e.g.*, car trouble or EXTREMELY unexpectedly bad traffic) should be the only reasons for such absences. Inform the Department as soon as possible if you will be absent due to an emergency, even if you have found a substitute. If you are teaching a discussion session, also inform the primary instructor. You do not have the right to require students to attend a makeup meeting at times different from the regular class time.
7. Maintain your composure in class, no matter how much you are being baited. Students recognize if someone in the class is being obnoxious, and most will probably be sympathetic to you if you keep your cool and respect you if you handle the situation effectively. On the other hand, if the TA responds in kind to an offending student's level, the other students will probably view this more as a fight between two students, and you may lose their respect.
8. In almost every class there will be instances where one student is talking with another, and if these are isolated occurrences that do not interfere with the class discussion it is best to ignore such conversations. However, if students are disrupting class discussions with separate conversations, giggling or similar behavior, the usual suggestion is to first try lowering your voice and allowing peer pressure to quiet the students. If that doesn't work, you might want to catch their eye and frown to show you disapprove. The next step would be to make a statement to the entire class that it is really important not to have background noise because people in some parts of the room cannot hear what is being said. If none of these work, try to catch the students after class and talk to them about their disruption, including the way it makes *you* feel. The method of last resort is to say something directly to the student in the class. This is often very embarrassing, and it will turn off many of the students, but if the choice is embarrassing a few students and allowing others to learn, then embarrassing

- the offenders is appropriate. However, you should try other approaches first.
9. Deal equitably with all the students in your class. Don't ignore one group of students while recognizing others, and be careful to pay attention to students seated at the edges of the classroom as well as those in the front and center. Avoid stereotyped remarks about groups of people; for example, it is totally inappropriate to say that mathematics is especially hard for a particular gender or ethnic group, even if it is meant to be helpful. Never make jokes to your students that are based upon gender, ethnicity, culture, religion or sexual orientation. Don't refer to students by relationships or outside interests (*e.g.*, if you have a student who is well known for some extracurricular activity, ignore this fact). Although it is now well understood that discrimination against specific groups of people is wrong, you should also avoid giving very special treatment to students in such groups. This can build resentment among others and even among the students you are trying to help (it might seem to suggest that you regard the latter as inferior).---Don't be afraid to seek advice from TAs or senior graduate students who are in a group that is different from your own.
 10. Check your mailbox regularly. At least once a day is strongly recommended, and preferably before you go to teach (as noted before, there may be some important last minute information).
 11. The use of humor is a delicate issue. If you are naturally inclined to tell jokes, then you do so PROVIDED that you avoid subjects that might offend anyone in or out of the class. On the other hand, if you generally do not tell jokes, you should not do so in class. If you are an international student, you should be particularly cautious about using humor until you are extremely confident that you will not say something that is offensive or whose humor will not register with the students; these rules apply equally well to students whose English is fluent, including native speakers from other English speaking countries (for example, people in the U.S. and Great Britain often do not get the points of each others' jokes).
 12. One award winning TA compared his teaching approach to an evangelist trying to save people's souls. This may well be overstated and is not the best approach for everyone, but the motivation of students is an important factor in teaching. Most students in the class are, or should be, capable of learning the material, and one objective should be to persuade the students that they can really do so. Try to create a common sense of purpose with your students. The relationship with students always involves some confrontation, but it should also involve some cooperation. Make it clear that you want them to learn, but remember that knowledge cannot be given ### it must be taken.

Common concerns expressed by students about instructors

These are taken from student evaluations, both here and elsewhere

1. Not being in their offices during office hours.
2. Insulting, humiliating, and being rude to students, either verbally or in written comments on their papers.
3. Not knowing the material or coming to class unprepared.
4. Having a negative attitude about the course, saying things like "I really don't like

- to teach this” or “I really don't want to be here,” or reflecting this attitude by missing class, coming late or unprepared, or dressing inappropriately.
5. Not returning tests and homework promptly, giving minimum feedback on tests and/or not going over tests.
 6. Adding extra assignments to syllabi or asking students to spend extra money for books or materials not indicated in the course syllabus.
 7. Extending a deadline for students who have not completed an assignment when others worked to meet this deadline.
 8. Showing favoritism.
 9. Not being honest with the students.
 10. Being impatient, defensive or angry when students ask questions.
 11. Locking the classroom doors to prevent latecomers from entering.
 12. Telling inappropriate (*e.g.*, ethnic, political, racist or sexist) jokes.

Advice from other teaching assistants

Now it's time for some feedback from TAs on things that should be done. This comes from a survey done at the Purdue University Mathematics Department by an outside unit in the University. Many comments restate advice already given, so we shall concentrate on points that seem new in some sense.

Question: If new TAs asked your advice about teaching undergraduates, what would you tell them?

1. Explain why each step was taken, how to decide which step to take, steps not to take.
2. Be open to constructive criticism from your students. Much can be learned from their suggestions.
3. You have to remember to be very patient and understanding of some of the questions they ask. Something that seems trivial or obvious to me, isn't to them. I try to keep in mind how my teacher (and professors) must have felt when I asked questions in class.
4. Be friendly with students but make sure you're in charge of the class. Don't let students take advantage of you [*and many are quite skilled at this!*].
5. Don't promise anything.
6. Never assume a student knows the reason for a particular step in a problem, so always explain thoroughly.
7. Students learn more when they feel comfortable to ask questions in class.
8. If you are not sure you understand a student's question, don't hesitate to ask him/her to repeat it ... Remember that the students are as intimidated by you as you may be by them ... Never let a student feel that he has asked a stupid question even if you think he has. Phrases like “that's a good point” or “I'm glad you asked that” seem to build their confidence a lot.
9. Remember that some students will fail no matter how hard you try with them.
10. Set your standards right away because the pattern is quickly set.
11. Use your common sense ... Care about your students and make it obvious to

them that you care and that being a TA is more than a way to finance your own education.

12. Explain grading and tell the students why points were deducted.
13. Don't rush through material. If students don't understand don't expect that they will ask questions ... If you see them getting writer's cramp because you're speeding along, pause to let them catch up.
14. Teach things CLEARLY (as opposed to rigorously) and accurately.
15. Be willing to spend time to learn teaching techniques. Do not regard teaching as an easy job.

More suggestions for improving rapport with students

These are taken from the study guide, *Student–Teacher Relationships*, distributed by the Center for Instructional Services at Purdue University.

16. Learn your students' names. Seating charts, conferences and photographs are ways to do this.
17. Listen to your students' thoughts and feelings.
18. Observe the nonverbal behavior of your students to see how they are responding.
19. Be clear in your written and spoken communications.
20. Be aware of the assumptions you have made about your class, and be willing to adjust if these assumptions appear to be incorrect.
21. Identify your verbal behaviors. Do you primarily lecture? Do you ask questions? When your students answer, do you give recognition and support to what they say?
22. Ask open — not closed — questions.
23. Look at your students and check their general well being, noting any visible differences.

Student interaction outside class

Earlier we discussed the advantages of encouraging this at the beginning of the course. It may also be worthwhile to offer to match students who have no one to work with but want study partners.

Allowances for cultural differences

We shall concentrate on special issues facing non-domestic teaching assistants. Some other issues concerning non-domestic students are discussed in the section on international teaching assistants (pp. 14–20) in *The Next Step*. Teaching in one's own culture and first language is not easy, and doing so in a foreign language and a different culture is of course even more difficult. Student backgrounds and expectations about the instructor and course may be very different from their counterparts back home. Here are a few general comments.

Elementary and high school requirements are set at the state and local level rather than the national level, and therefore there are considerable differences between the educations in individual school districts. In the same vein, high schools in the U.S. do not have comprehensive exams at the end of studies which enforce a minimum level of competency, and in a state as large and diverse as California the differences between high schools can be enormous. Acceptance to a university is not necessarily based upon entrance exams requiring minimal knowledge (although the Mathematics Department at UCR has adopted a system of screening exams for elementary courses). In particular, the default criterion for admission to the University of California is being in the top twelve per cent of one's graduating class; given that some schools in the state are outstanding and others have serious quality problems, student abilities vary widely from one individual to another. Many students start college in the U.S., but substantial numbers never finish. There is an underlying belief that everyone should have a chance to obtain a college degree. The students have widely varying levels of preparedness, study skills, motivation and maturity. Most beginning students and non-majors expect to be told what is required of them and to have the material explained to them in detail (previous colleagues of mine often used the phrase "spoon feeding" to characterize the level of explanation). American classrooms might be less formal than classrooms back home. In particular, interrupting the instructor with questions is common and not necessarily a sign of disrespect. Many undergraduates in the U.S. have had little contact with people from other cultures and have never interacted with people for whom English is not their first language. In particular, students often will not spend much effort to understand English with an accent much different than theirs (at my previous institution there were even complaints about an American TA and an American faculty member from the East Coast with distinct New England accents, and even with a fairly standard North Central accent I have had extreme difficulties conversing with some Americans who were born and raised in the Deep South). If students are fearful of a mathematics course, having a non-domestic instructor can intensify these fears, and it is not uncommon for them to blame the instructor if they perform poorly. — Although some students have the ability to look beyond the surface and appreciate and understand other cultural backgrounds, a foreign born TA must recognize that others are quite ethnocentric and will make little attempt to understand their TA's personality, attitudes and culture. Studies have indicated that the single most important factor influencing communication between foreign born TAs and domestic students may be the extent of the students' ethnocentricity. An international TA must be aware of the situation and take steps to reduce the negative effects that cross cultural misunderstandings will cause. For example, learning as much as possible about American culture is advisable. Books are one source, but watching people and observing body language are also important, particularly since communication plays such a large role in the work of a teaching assistant.

Difficulties with English will not only cause problems with teaching, but they can also prevent you from finding employment in an English speaking country if this is something you plan to do. **It is to your advantage to work on improving your English as much as possible, even if you have passed through the basic screening processes.** — **YOUR** willingness to work on this is the most important single factor. It takes practice time and a certain quality of attention to improve, just like playing a game or a musical

instrument. Don't avoid speaking English, and don't stick to speakers of your own native language(s). Get a television and watch it when you can. News and documentary programs are generally the first things that people are able to understand reasonably well (but local news can be difficult because the language tends to involve unfamiliar references). Game shows are also useful, but comedy shows are surprisingly difficult because they often use plays on words that appeal to a lengthy experience with a language and culture. When you feel at ease with television, get a radio and listen to it when you can (TV comes before radio because the pictures are a valuable aid to understanding). Read campus, city, state and national newspapers and magazines; even tabloid type magazines that you wouldn't even think of reading in your native language(s) can be useful because of their level and their use of idiomatic expressions (***Extremely ironic point*** — Even if one does not use the “censored” words in a foreign language it is important to know what they are and how they are pronounced if you are going to be using the language extensively. One obvious hazard is that a person will mispronounce an ordinary word or phrase so that it sounds like something that is taboo. Unfortunately, few “respectable” sources of language instruction and reference say much if anything about such words and expressions). Pay careful attention to pronunciation and sounds in American English that have no counterpart in your native language(s). Also, although English does not use voice tone as extensively as other languages, voice tone can affect the meaning of the spoken language, and it is also good to pay careful attention to this aspect of spoken English too. Of course, an exhaustive list of hints for mastering English is beyond the scope of these notes, but the preceding may help you get started in upgrading your skills if necessary. — Last but not least, the longer one speaks a language the harder it is to change one's speech patterns, and satisfaction with one's progress should lead to complacency. Don't wait until you are looking for a job to improve your skills. — **DO IT NOW!!!**

The whole issue of English proficiency can be summarized as follows: You should take problems in stride without ignoring them or worrying excessively about them, you should speak at a moderate speed with very clear pronunciation, and you should recognize the continuing need for someone holding a teaching job in this country to maintain and improve his or her American English skills. **These apply to native speakers as well as to international teaching assistants.**

The book, *Culture Shock! USA*, by Esther Wanning (Graphic Arts Center Publishing, Portland OR, 1991, ISBN 1-55868-055-1), gives a very readable overview of the basics of life in this country with considerable emphasis on the differences between the U.S. and other lands. Even though many aspects of American culture are highly visible throughout much of the world, the view of the U.S. from elsewhere is necessarily incomplete and often inaccurate or oversimplified in some respects. No matter whether one likes or dislikes certain things about a particular country, it is necessary to adjust to them if one is going to live there, and a good understanding of a country's ways allows one to make the necessary adjustments more easily. There is another book in the same series for California that might also be interesting; however, reviews of this book are somewhat less favorable.

Advice from nondomestic teaching assistants

The items below are taken from the TA survey mentioned above.

24. American students are not trained (expected) to be army-disciplined.
25. Talk to a lot of people ... Speaking at banks and shops helps more than speaking to people at the University!
26. Do not talk too fast and pronounce words clearly.
27. Be prepared and confident when you go to the classroom.
28. Don't be afraid of students. Most American students are really nice and willing to give you a chance.
29. Get some advice from older non-native speaking TAs [*regarding English fluency*]. If possible observe such a TA's performance.
30. The most important thing is to understand the students' questions. Most can understand at least some "broken" English.
31. Use the standard American terms and pronunciations for certain expressions; for example use "absolute value" rather than "mod" and say "zee" rather than "zed." [*Differences between American and British pronunciations are usually not a problem in themselves, but there are also words that are viewed as acceptable on one continent but have meanings on another that make them totally unacceptable — this is something that even native speakers must think about!*]
32. Take it easy! Don't worry about complaints if only one student doesn't like you.
33. Work on English diligently because that is a part of culture, not only teaching.
34. Try to talk more with American students and learn more about America.

Allowance for other differences

Even if you come from the same culture and general area as your students, it is unlikely that most students you will be teaching will be a lot like yourself. The students are often in the course because it is required, they probably are not as positive about mathematics as you are, and they will not be interested in theorems, proofs or clever counterexamples. A career that makes extensive use of advanced mathematics is often one of the last things they would want. They are more interested in knowing the bottom line answer rather than in understanding how to find it. On the other hand, this does not mean that you should not require the students to be able to show their work clearly and correctly.

Classroom contracts between students and instructors

Large lectures are necessarily held in lecture halls rather than ordinary classrooms. The physical properties of these rooms and the numbers of students require special classroom procedures for both instructors and students. Things that are usually understood or handled informally in a class of 20 to 40 often must be spelled out, formalized and given special attention in larger lectures. As the number of students increases, the level of

contact also decreases. Even with 40 students it is possible to interact, conducting face to face discussions, soliciting and answering questions, and becoming familiar with essentially the entire class if desired. When the number of students is between, say, 80 to 200, the chances for dialog with students are much less, but a few questions are still possible and generally the instructor can see everyone in the class and lecture without props like a microphone or an overhead projector. In larger classes the instructor is more of a performer than a teacher in the usual sense. The students tend to become a faceless mass, and the instructor tends to become a disembodied combination of a voice and a hand holding a pencil or similar instrument. As with all performances, mistakes in a large lecture are less likely to be forgiven by the listeners. Preparation is therefore more crucial, good public speaking techniques are indispensable, and the relative importance of style compared to substance is significantly greater. One way of being explicit about expectations for students and the instructor is to prepare some sort of contract describing the rules of conduct for both sides. Although many instructors probably feel that formal signed documents are too bureaucratic for their tastes, it still seems worthwhile to consider the underlying ideas behind a contract, even for regular sized classes. If an outline is handed out at the beginning of a course, information on student-instructor expectations seems like a natural part of the writeup. The rules for an instructor should tell the students what they have a right to expect, and rules for students should be simple and reasonable. The students should be informed about their rights to appeal if they feel the instructor is breaking the rules (*e.g.*, speak with him/her privately or in class, complain to the appropriate office if things aren't worked out) and the consequences of violating the expectations for students (*e.g.*, in some cases repeat offenders might be dropped from the course). Here are some typical rules for instructors. These were taken from a large lecture sociology class, so the rules for a mathematics class would probably be at least a bit different.

1. Being on time for class; more precisely, being in the room when the bell rings [as noted before, minor lapses in large lectures are not forgiven as easily as in ordinary classes].
2. Being willing to spend at least five minutes after class at least once a week for individual questions or discussion (this seems to assume that the instructor does not have another class immediately afterwards). Putting lecture outlines on display, say on the overhead projector, during each class to indicate the structure and content of the session.
3. Making general announcements about course matters not covered in the syllabus at least twice on successive days.
4. Answering questions about class matters to the best of his/her ability and never using sarcasm or humiliation in responding (*i.e.*, respecting all questions and students as serious).
5. Whenever possible, announcing class cancellation ahead of time or, in unexpected emergency, getting word to the class at the beginning of the class period.
6. Accepting written or oral questions before or after the class period and responding in class. When written, these may be submitted anonymously. [*Electronic messages should be included with allowances for anonymized messages; however, learning an anonymization process would seem to be the responsibility of the student*].

7. Discussing in class any substantive suggestions or criticisms received, and incorporating suggestions whenever possible.
8. Never holding the class for more than thirty seconds after the closing bell and, when possible, to dismiss before the bell.

Conversely, here are some typical rules of conduct for students in a large lecture. Some of these clearly apply also to smaller classes.

1. Being seated before the bell whenever possible.
2. Ceasing to talk after the bell.
3. Refraining from speaking to seatmates during class (including movies or videos).
4. Remaining seated and attentive (or at least not restless) until dismissed, and refraining from *preparing* to leave until dismissed.
5. When unavoidably arriving late or having to leave early, entering by the main door and sitting near this entry.
6. When arriving on time, leaving empty the seats near the entry for late arrivals or those who must leave early.
7. Submitting written questions if you do not wish to speak in class.