It is an important job, and you should endeavor to carry it out with dignity and professionalism.

2.5 Homework

In most lower-division courses, and many upper-division ones, it is by way of the homework that you have the greatest direct interaction with your students. When students waylay you after class or come to your office hour, it is usually to ask you about a homework problem. This is why the exercise sets in a textbook are often the most important part of the book (textbook authors do not seem to have caught on to this observation yet) and why it is critical that homework assignments be sensibly constructed.

Let me stress again that I am not trying to sell you a time-consuming attitude or habit. If you take twenty minutes to compose a homework assignment then you are probably taking too much time. But consider the following precepts:

- Do not make the homework assignment too long.
- Do not make the homework assignment too short.
- Check over the problems you assign to confirm that there are no notational or obvious typographical errors. (Students can waste great amounts of time trying to fathom typos that are trivial to you and me. As a result, they become quite frustrated and angry. Doing this sort of checking shows them that you are on their side.)
- Be sure that the assignment touches on all of the most important topics.
- Be sure that the homework assignment drills the students on the material that you want them to learn and the material that you will be testing them on.
- Make sure that at least some of the homework problems are graded.
- Plan ahead. The exams that you give should be based only on material that the students have seen in the classes and in the homework.

If homework does not count and is not graded, then students will not do it. That is a fact. I realize that many of us have neither the time nor the inclination to spend long hours each evening grading homework. Many universities and colleges these days simply do not have the resources to provide enough graders for lower-division courses. But there are compromises that you can make. For example, you can tell the students that, of ten problems on the homework assignment, just three will be graded. But don’t tell them which three. This device will force most of the serious students to do all the homework problems, but it requires much less grader time to get the grading done.

If the last suggestion will not work for you, then you can give weekly quizzes that you yourself will grade. The amount of your time involved will be little,
and it is a device to force students to keep up with the work. Incidentally, this
device also gives you a gentle way to keep your finger on the pulse of the class.

Consider the implementing following policy to help get your students more
interested in doing the homework. Students can and do benefit from collabora-
tion, just as we mathematicians do in our research. While you probably do
not want to encourage collaboration on exams, you may wish to encourage it on
homework. Of course I'm not talking about "I'll copy yours this week and you
can copy mine next week." Instead, I'm talking about an intelligent exchange of
information among equals.

Some studies have shown that one reason that Oriental students in this coun-
try tend to do very well in their mathematics classes (and there are surely many
reasons) is that they work in groups. More precisely, they first work hard as
individuals. Then they get together and compare results. In short, they collab-
orate in much the same way that mature mathematicians collaborate. They are
willing to say, "I can do this but I cannot do that. What can you contribute?"
At the same time, the studies indicate that certain other elements of the student
population are either loath to work in groups or are unaware of the benefits of
this activity. These strata tend to do poorly in mathematics classes. See [TRE]
for details.

Some of the more interesting teaching reform projects, including those from
Harvard and Duke, are specifically designed to encourage students to learn math-
ematics through group activities. Reports on these experiments are encouraging.

If you do decide to encourage group work in your classes, then you will have
to make peace between said collaboration and your grading policies. If homework
is not collected, then there is no problem and you can separate the good students
from the bad through exams and quizzes. If instead homework is collected, then
you will have to consider carefully how to tell whose work is whose, or at least
how to divide up the credit.

2.6 Office Hours

At most universities the instructor is required to hold three or more office hours
per week. Choose three hours that are convenient for you or convenient for
the students or both. Monday/Wednesday/Friday at 11:00 A.M. is, on most
campuses, one of the most popular times for classes. If you schedule your office
hour at that time then many students will not be able to attend. One good
strategy is to stagger your office hours, so that they are at different times on
different days. Another is to make an office hour from half past the hour to half
past the hour, so that a student's class is likely to overlap only half of it rather
than all of it.

Of course you cannot select a time for office hours that will please everyone,
so don't even attempt to do so. Set your office hours, and announce them,
and explain to the students that you can make appointments for those who
cannot attend the regularly scheduled hours. Such an announcement will not
appreciably increase the number of visitations from your students, and it is just
good business to set such a policy.