

Top Ten Teaching Tips (from Bob Hilborn)

1. Talk to a more senior faculty member who has taught the course recently. Even if you don't follow that person's advice in detail, you will get a good idea of the flow of the course and you will also let others know that you are interested in working on your teaching.
2. Be organized. Plan your syllabus carefully and stick to it as much as possible. Return exams and homework in a timely fashion, ALWAYS!
3. No surprises. Let students know what you are doing, why you are doing it, and stick to your plans.
4. Be energetic (within reason and within your comfort zone). Your enthusiasm for your subject is contagious.
5. Let the students get to know you. Say a little bit about your research and your interests in physics and astronomy. Tell them a bit about your hobbies and interests outside science.
6. About three weeks into the course, have the students complete an informal course evaluation form (either paper or online). This will give you good feedback about how various aspects of the course are going in time to make some "mid-course" corrections. In addition, the students will appreciate your asking them for feedback. Implement at least one of the student suggestions and tell the students that you are doing so.
7. Come to the classroom 5 or 10 minutes early and talk informally to students.
8. Get to know the names of as many students as you can. One possibility: if the class is not too large, have the students come by your office to pick up their first exam results.
9. Allow students to earn "redo points" on exams by turning in (within a few days of getting their exams back) detailed written solutions (with lots of written explanations) for those questions for which their scores were below 75% (or whatever cutoff you think is appropriate). If the detailed solutions are correct they can earn up to 50% of the points they missed. For example, a student who got 60/100 on the original exam could earn up to 20 redo points by following through on the detailed solutions. This procedure allows students to master the material they missed and relieves a lot of exam anxiety. The procedure works best if you are assigning grades passed on fixed numerical standards and not on relative rank in the course. You also need to be strict about the quality of the written solutions. If the solutions are not clear and if they are not almost completely correct, the student gets no redo points.
10. Ask your department chair to give you a variety (but not too large a variety) of teaching assignments before tenure time: at least one introductory physics course, at least one upper-level (either undergraduate or graduate course). You should be sure to ask to be allowed to teach the same course at least twice.