

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Department of Physics

Physics 8.01x

Fall Term 2001

STUDENTS' ADVICE ON SUCCEEDING IN 8.01

Three years ago 34 students chosen at random were interviewed in depth about their experiences in 8.01. The students interviewed included those who did well and those who did not. One of the questions asked was "What would you tell a freshman next year about how to succeed in 8.01?" . Here is their advice.

While these students took 8.01 and not 8.01X, almost all of their advice is also relevant to 8.01X. I've added a few notes.

1. Keep up and do the problem sets¹ regularly.
2. If you are not familiar with the stuff, go to the lectures, go to the recitations and do the problem sets. It sounds pretty simple, but a lot of people don't do that.
3. Do the homework sets. Keep doing them!
4. Take 8.01X.²
5. Success in 8.01 is figuring out the pace and figuring out what you need to do.
6. Attending lectures and recitations is important because the material is not new - is high school level physics - but that way he knows what material to study, what to expect on tests.
7. Keep up with the work. With physics, you need to do a lot of physics problems to get the concepts.

¹Do you notice a recurring theme in this advice? Yes! **Do the problem sets!!** And for 8.01X, do the Cybertutor exercises and the take-home experiments. This will make all the difference.

²Well, you're already doing this!

8. Keep up with the problem sets.
9. ...
10. Put effort into 8.01 and you will pass.
11. You have to work the problems. Don't put them off.
12. Definitely set time aside to do the problem sets and do every problem that is assigned.
13. Do a thousand problems until you cover every kind of problem that can be asked on a test.
14. Do the problem sets to be sure you know what you think you know.
15. Do the homework and pace yourself - don't put off the work until the test time.
16. Do the problem sets.
17. The best way is just learning through hard work. The problem sets are the most helpful to learn the materials.
18. ...
19. Try to be more alert about how exactly they go about solving problems.
20. Pay attention to units.
21. Keep on top of the problem sets and get extra help if you don't understand something.³
22. Doing the problem sets and not just reading the solutions.
23. Do your problem sets. Go to tutorials.
24. Keep abreast of the material.
25. ...

³The instructor, TAs and tutors are all available for extra help, during office hours or by appointment. Please take advantage of them!

26. Just do the work.
27. Do what you have to do to learn the stuff.
28. Can not understand how people can fail if they do these problem sheets.
29. Do your problem sets and go to classes.
30. ...
31. Work with other people!⁴
32. Do the problem sets.
33. They should not take advantage of the fact that the homework isn't graded; they should definitely do it.⁵
34. Definitely do the homework - it is most important.

GOOD LUCK!

⁴Working with others is completely encouraged! If you don't understand something, discuss it with your classmates as well as your TAs. Often, the best way to learn something is to try to explain it to someone else. Don't just copy others' homework solutions – you'll get nothing out of doing that – but collaborative work is perfectly fine.

⁵In 8.01X, homework **is** graded, but the advice to do it is still good! When the graded homework is returned to you, look over the corrections and ask the instructor or TA about anything you do not understand.