How to make an A in Physics 201/202 (10F). Submitted by students who earned an A in PHYS 201-1M 10F.

If you are looking to make an A in Physics 201 it would be in your best interest to attend class faithfully. It will be difficult to understand the material if you do not attend class on a regular basis. Dr. Young provides homework video tutorials online that are very helpful in solving and understanding the homework problems. I strongly suggest using the videos to help you attain an understanding of the homework material, but do not rely on the videos too much. Make sure you can eventually work out the homework problems without any help from the videos. While studying for an exam, you should also check out the old exam questions. I suggest you study these questions as much as the homework problems because these questions are very similar to the highly weighted constructive response questions on the exams. Make sure you study and understand the concept tests because these are similar to the multiple choice questions that account for about thirty percent of every exam. Never wait until the last minute to study for the exams because exam material can sometimes be a heavy load and seem overwhelming if it is put off. Lastly, always take advantage of Dr. Young’s office hours because they are there for your benefit. If you have any confusion or questions about the course material never hesitate to ask Dr. Young for help because he is always willing to help his students. Good Luck!

My advice to future students would be to follow these guidelines:

1) For every new chapter/section discussed in class, keep notes on everything discussed in class in separate sections in your notebook. Later that day, go back, review the notes and anything that seems important (formulas, definitions, questions that involve more logic than using just one formula, etc), mark with a highlighter.

2) When Dr. Young gets to examples in class for the chapter/section, it's time to give the homework a try (don't be discouraged if you cannot work some/all questions; it's good to get exposed to them). I found watching the homework videos more helpful than downloading the ppt slides. I would pause at the beginning of each question, copy the questions, then attempt to solve it, and then continue the video to see if I was correct.

3) When the date for a test/quiz is given, now is the time to make sure the information in class is general knowledge to you. I found redoing homework problems again without watching the video, studying all highlighted sections in my notes, and quizzesing myself with concept test questions helped prepare me for the test/quiz. If I could work all the homework problems and get them correct and could recite formulas off the top of my head, I felt I was prepared for the test.

These are basically the guidelines I followed for 201 and feel they'll work for anyone taking 201 also.
Nothing was more helpful to me than the homework videos. I would try to work the problem myself then watch Dr. Young work them on the video and compare my work with his. Eventually you learn to work the problem the same way he does and it all makes sense.

How to make an A in Physics 201/202 (09S). Submitted by students who earned an A in PHYS 202-1M 09S.

I didn’t miss but one class this semester. Also, TRYING the homework before we went over it in class really helped me understand the material, because I had already been exposed to it and I could ask questions about them. I would study very hard for the quizzes so when it was time to study for the test I already knew a chapter or two, and I could focus more on the chapters I didn’t know yet. I would do the homework problems twice without looking at my notebook to ensure I knew the material for the test.

Physics is a challenging, interesting course that requires both diligent work and mastery. Mastery of the course will allow you to retain pertinent skills that will help in your future career as well as your current and future college courses. There is a considerable difference between memorizing material to pass a test and learning material for the future. Since you are taking Physics with Calculus, Physics will help you in your career—and most likely with other difficult courses. Memorizing or cramming will not allow you to retain the valuable skills offered to you in this course. Also, this course is difficult, and can only be passed by brilliant students—usually with a low grade—in this manner. Unfortunately, I have witnessed intelligent students underestimate the course and not achieve a passing grade.

My goal in college is to master all course material in the most efficient way possible. Physics 201-203 has been one of my most enjoyable and beneficial courses. Not only is the material interesting, but the course is taught by one of my favorite teachers and the best that I have encountered. Dr. Young teaches the course in a fun, structured way—with exciting movie clips and helpful, entertaining demonstrations. He also enhances the class with extremely helpful additional techniques such as Gaussian Elimination—and in this case offered extra credit for mastery. Gaussian Elimination, along with our study of 3-space, helped me in both Calculus II and III. My skill set was most enhanced, however, by the immense increase in my problem solving skills. I now feel more competent and confident in my upper level computer and math classes. The once intimidating problems now seem trivial.
The best part about mastering material—especially in this course—is that it requires about the same time as cramming enough to pass such a difficult course. First, pre-read each chapter before it is covered in class. This way you will better understand the lecture and be able to ask questions on the material—instead of trying to absorb a vast amount of new information. Next, try to attempt the homework before you see the solutions. If you are able to solve the problem independently—then you will not forget the method. If you are unable to solve the problem—ask in class—and then try to do the problem by yourself. Some chapters are much harder than others—in these cases, I recommend re-reading the chapters after the lecture and trying the example problems. If time permits in your schedule, redo the problems in the chapter shortly after covering the material—this may seem like a lot, but the more you do the problems the less time they will take. Before quizzes and tests, redo all problems (actually work them again). If you have done them competently already, then it should take little time. I actually studied for my Physics tests very little right before the test. The two biggest tips that I can offer, for all courses, are studying by writing and helping classmates. From my experience, writing the material down in a scratch notebook is a quicker method so that the information will accurately remain with you. Also, you don’t really know something until you can teach it. I did the best in the course when I began spending a little time with my peers who were struggling with particular material. I was amazed how well I knew the material after helping them.

I’m sure you have noticed that I am a bit of a perfectionist. These suggestions, if followed in entirety, are above and beyond what it takes to pass the class, but instead will allow you to achieve a high A and probably test out of the final without extra credit. I hope that you can use some of my advice, and I am confident that it will help you, as it has helped me. I also ask that you review my paper and consider its short and long term benefits seriously. Any method you choose will become easier with experience. You are lucky to have the best teacher, Dr. Young—who wants you to succeed, and with a little effort and a positive attitude you can greatly enhance your skill set.

To make an A in Physics you must go to class every day and pay attention to the lectures. The suggested homework is a good place to start studying and examples in the book are very helpful in understanding the material. Also make sure to go over the concept tests before every exam. Good luck and enjoy learning how the world works.

To Future Students,

The best way to achieve an A in Physics is quite simple- ATTEND CLASS. Dr. Young is a very good teacher and makes the time in class worthwhile. Physics is one of the only classes I have ever taken where I did not constantly look at my watch to see how much time remains. Also take advantage of Dr. Young's willingness to help....send an email, come by during office hours, or ask after class because class tends to never go the whole period. Dr. Young makes a sincere effort to get to know his students so give back and respond to him....it will pay off in the future. Lastly, if you open your mind up to learn in the class and put some effort in you will do well because Dr. Young gives you the tools you need to succeed in his class! Best of Luck!