

II | Attending Lecture

How often have I listened to students moan and groan about how pointless the Lecture is and how it wastes time because they get nothing out of it. Well, if you don't do as part I suggests, then yes, it is a waste of time, and you should just drop out of college already. I recommend you go to a movie in a language you do not speak without subtitles, and learn it without first teaching yourself the language. Math is a language!

Let me assure you that if you do not attend the Lecture, you will most likely fail the course. Maybe you'll get lucky and scrape by with a D- or a C or have a private tutor help you plagiarize your way through it, and in junior year, you'll be screwed. Likely, you will just fail.

Why? First off, if you do not study the material before the Lecture, you won't understand anything, so then, yeah, what is the point of going? You could just use the tuition for a down payment on a house, get a job, and start living. Why waste your time and energy?

Secondly, the professor may be a jerk or unpleasant—you would be too if you had to deal with college students like yourself. But they, too, have emotions and feelings. They prepared this Lecture as you would prepare a party for your friends. How would you feel if one of your friends didn't show up to the party because they thought they would get nothing out of it? Professors do care if you show up (for the most part).

Thirdly, regardless of whether the syllabus says attendance is required and counts for credit, it will. I have seen students with worse grades pass with a C for showing up than students with better grades pass with a D for not showing up.

As much as we want to have faith in equality, everyone is discriminatory towards something, no matter their stature, race, religion, beliefs, or anything else; we are all guilty of this. You will never get an A if you don't attend every Lecture, participate, and prepare for them.

Fourthly, from my experience attending college for 23 years and tutoring students from almost every state university or college in the country, and from some in other countries, the questions the professors solve during lectures are the ones that will be on the exams.

Professors are always dumbfounded by how badly students do on exams, considering they gave all the solutions to every problem in detail, along with all the tips and tricks, directly to students during the Lecture and in the textbook reading. (This is—in general—mostly true.)

Fifthly, "Tips & Tricks." Oh, how it pains me to tutor a student and explain the tiny little trick that turns a mountain into an ant hill, only for them to not believe me because they didn't already know it. I ask them to get the notes from class (if they have them), so I can instantly show them the trick the professor explicitly explained. Ignorance, arrogance, and defiance are your enemies in math and college. Just assume you know nothing; it will be easier this way.

So, what do I mean by “tips & tricks?” There are always easier approaches to questions. Generally, these tricks are required to solve some problems as you would not learn how to solve them from the raw until your upper-division junior, senior, or graduate-level courses. They are often hidden in the question banks, not in writing, or they are given in lectures. Without them, you will not be able to answer many exam questions. So, attend the lecture, pay attention, and copy every question and solution. It will pay off!

i. Paying Attention

Paying attention? What an odd thing to say. Why would anyone pay attention when they don’t get anything out of a lecture?

I have the most challenging time paying attention when I have to write notes, so I don’t take notes—I just pay attention. Some people are the opposite. You have to figure yourself out.

I would say: It is a heck of a lot easier to pay attention if you prep on the section before the Lecture. Wow, is it easier? Even fun because you’ll be the only one in the class that can answer any of the questions the professor asks. Have you ever been in class, and the professor asks, “Can anyone answer this?” And no one can? How could they? They didn’t read the book, the lecture notes, or do any research on the topic.

Regardless, the BIGGEST reason to pay attention is because of ‘the tricks’ and ‘unique questions.’ Tricks to solve otherwise unsolvable problems at your level can only be learned in lectures or by doing research. Questions on the exams that are not in the textbooks can only be recorded in lectures.

Nine out of ten problems on exams and in lectures can be solved using tricks, making them surprisingly easy. If you ever find yourself going down a rabbit hole to solve a problem, ask yourself, “How is this even possible to complete in an hour on an exam?” It is because you didn’t know the tricks and were not paying attention in the Lecture.

Always take note of every question, its solution, and any tricks from the Lecture. You’ll be well prepared for exams.

ii. Participating

Yes-yes-yes. You are shy, lah-d-dah. It is time to grow up. You’ll be studying and taking care of yourself for the next 4 to 5 years, then you’ll graduate and continue this. Time to stop living in your head of fear. By the way, whatever you are thinking, so is everyone else. And the person sitting at the front of the class who appears smart, answering all the questions. Guess what? That is the one who is retaking the course—a false projection of intelligence to feed an insecurity of failure or something like that. I know this because I was that person.

The person in the back of the course who is so quiet that no one knows or talks to them. That is the photographic memory that aces everything. The people in the middle who only care

about understanding the material, not their grades, are the ones who make groundbreaking discoveries and excel in the science they study.

Ask yourself, ‘What classification am I?’ Do you need people to think you are smart? Are you just an A student? Do you love science and want to embed your life into it and focus all your energies on it and nothing else? Or are you simply in the wrong major? Figure it out sooner rather than later so you don’t waste time and money just to end up in another major.

Some of us do grunt work nine to five and have a life. Some of us have no energy and do science twenty-four-seven. Some of us become managers of other scientists because we can’t do original thinking. Just figure out who you are. There is no shame; you’ll be much happier and more content.

iii. Making Yourself Known

Why would you want to make yourself known? You’re shy and want to hide your head in the sand and let the world pass by. That is okay if that is your thing. And you may be fine getting an A in the course without saying a word. This part is more for those who put in 80%. I think, in college, our grades reflect only half the effort we put in. So, if you follow the tips and tricks I offer in this book, you can increase that effort effortlessly.

- 1) When you participate in class, you will be favored in the grading system simply for helping to make the class less boring. Professors (in general) want interaction from the students. Do you have any idea how boring it is to stand in front of a bunch of confused students, talking to yourself? At the same time, you scribble nonsense on a board no one is paying attention to? It is boring, so when someone interacts, it entertains the professor, and they will want to reward you for this.
- 2) Office hours, office hours, office hours. Why? One, be strategic. Take a solution to a question you know you solved correctly and ask the professor to grade it for you during office hours (or after class if you cannot find time) in the same fashion they would grade an exam question. Then, you can learn what mistakes you made that will most likely cause point loss. The professor will find you very savvy for asking this and responsible and respectful. It is not a mystery; they will do this, help you, and respect you for asking.
- 3) Office hours! Why? Annoy your professor to no end with questions because this will help your grade because they (1) either do not ever want to see you again, so they will pass you, or (2) they don’t want you complaining about not getting an A, so they will give you that A!