

















How often do you attend the lectures and why?

Always

- I attend all of the lectures because it's a good use of my time and Professor Brown explains the concepts well that are hard to understand from just reading the book.
- I go to all of the lectures because they are important to helping me learn the material.
- I attend every lecture because I feel that going to class is the best way to learn the material.
- I attend lecture every time. I find Dr. Brown to be extremely personable, open to questions and discussion, and he does a great job of wording the material in a comprehensible manner.
- I attend all lectures. They are helpful, and the content is explained well.
- Every time, because I think I think it's a good use of time. I'd rather discuss material in class than just read it out of a book.
- I always attend lecture (unless some situation comes up) because I tend to do my homework over the weekend, so I actually know a little bit about the material before lecture, and the textbook is not very good at explaining material sometimes, so it's better to hear it again verbally.
- I attend lecture every day because it's a different way of looking at/learning the material as opposed to just reading the textbook. Just reading the textbook makes it difficult to learn the material.
- Every class, to learn linear algebra.
- I attend the lectures every time because it's good.
- I have attended every single lecture this semester. For me, the material is not easy. I work hard outside of class and I do my best to take every advantage to learn more about the material. Attending lecture is one of the few things you can control in college, so I try to take advantage of every opportunity to learn.
- I attend lecture every day. I prefer to keep my notes as comprehensive as possible.
- Everyday since I don't want to fall behind in class. The lectures are presented well and are helpful.
- Always. Otherwise, I would not understand the material.
- I have always attended the lectures in order to see how Professor Brown explains the material. With both the textbook's explanation and the Professor's I have a better chance of grasping the material because it is being presented to me in two different ways.
- I attend all of the lectures mainly because when I go back to read the textbook, I'll already have somewhat of an idea for what is going on in the class.
- I attend every lecture because I think that will help me learn and understand the material.
- I attend all lectures, because I would probably feel guilty if I didn't. It is a little hard to follow lecture, since the concepts are more conceptual and I don't have the foundation that I need yet, but I appreciate Professor Brown's efforts to help us understand.
- I go to every lecture. Because if I don't I'm not allowed to smoke weed. But also, I find that simply listening to the linear algebra "vernacular" that Professor Brown uses makes the material more cohesive and actually clearer after a while.
- I always attend lectures. I find the lectures helpful to understanding the material.
- I attend all lectures—I find them very helpful and I would hate to miss one.
- I always attend lecture but I often find that I do not learn anything that I actually use.
- Always!!!
- Every lecture because I know I will miss out on something important if I skip a lecture.
- Every single lecture. I like going through the proofs and enjoy Professor Brown's enthusiasm.
- Everyday. I got nothing else better to do.
- I attend every lecture.
- I attend lecture daily.
- I attend lectures everyday because it helps me understand the material thoroughly and mathematically, which would not be possible without assistance of the professor. During lecture, Dr. Brown puts concepts in such ways where I am led to think more like a mathematician instead of just being trained to solve problems correctly. I find that it is very important to attend lectures in every single class at Hopkins, and I personally saw drastic improvement in my final grades by doing so. I also think lectures in this class are good summaries of all the important concepts and theorems highlighted in the book, so I am not fighting the book everyday to learn the material. I find that the book notation is sometimes tough to understand.
- I go to all the lectures because this is where I do the most learning, and I like how professor Brown explains the concepts.

- Haven't missed one yet. I'm paying money for this stuff and want to do well, so why would I miss them?
- I attend every day to keep myself on track.
- I always attend lecture. Dr. Brown is passionate about what he is teaching and makes the lessons interesting.
- Always
- I go to every lecture. I use the lecture notes to understand homework problems and even though I don't understand most of the lecture, there is always about 10 20 minutes of really good information.
- I attend all the lectures so that I can better learn the material and keep up with the class.
- I attend all the lectures, since the material is fairly challenging to me, so I feel that the more exposure I have to it the better I'll do.
- I have been to every lecture this semester. I feel that lectures have been the best way for me to learn in all of my math course taken at Hopkins. I only every read the text book to review topics covered in lecture or find examples similar to homework problems so I can determine the best way to approach the homework.
- I've attended all the lectures. It would probably be more work to skip the lectures and try to learn the material on my own.
- I have attended every lecture because they are my main source of learning the material in this course.
- I have attended every lecture because I can understand course material better when the material is explained to me rather than reading it from a book. The notion and working used in the book is sometimes difficult to understand so going to lecture often makes the theorems and explanations easier to understand. I also feel more motivation to do the homework after I have attended lecture and am thinking about the material we have just learned.
- I attend every lecture because I enjoy just listening and trying to understand, even if I don't sometimes.
- Every day because there's no way I could learn linear algebra just by reading a textbook.
- I attend lecture every day because I find it to be the easiest way to learn material. I missed a lecture earlier in the semester and did significantly more poorly on the homework that week.
- Every lecture to understand the material better. The textbook is very difficult to learn from.
- I have attended all of the lectures, because they help me a lot with the conceptual understanding of the material. The teaching style works well for me, and I get a lot out of lecture.
- I attend lecture whenever there is lecture, because Professor Brown demonstrates how interesting mathematics can be! The content alone can become a little obscure during lecture, but the book in conjunction with Professor Brown's explanations fill in just about all the gaps.

Most of the Time

- I've skipped 3 classes so far, mostly because of other midterms or I was too tired to attend.
- Almost always, unless sick.
- Most of the time so I can better understand the material from a different lens.
- I've only missed two to three lectures because of other more pressing matters. In general, the lectures are very abstract.
- Mostly. To learn.
- I attend lectures almost every time with the exceptions of when I fall behind in reading the sections. This is because I don't understand the lectures if I have not read them in advance.
- Almost always, because it helps.
- I try to attend every lecture. The lecture material helps me to better understand what we are learning by expanding on the material and putting it into the context of the course and math as a whole. The rhetorical questions made to help us think about the material tend to do exactly that (at least for me).
- I attend every day except for when I got ill. I love coming to the class. It always keeps my attention.
- May miss one class every 2-3 weeks because of meetings, sickness etc. I want to go to as many classes as possible. I think that they are very helpful and easy to understand.
- Not as often as I should—there was a week or two where I just felt so behind on the material (as in, I'd be reading for the homework due the week of), the idea of having to learn the NEXT chapter in lecture just wasn't reasonable. BUT, this week (I'm really, really proud of myself), I started reading and doing homework really early on in the week so by the time we started discussing chapter 5 in lecture, I had already finished chapter 4. SO GUESS WHO'S GOING TO ACTUALLY BE IN CLASS THIS WEEK: D It's just difficult sometimes having to process two different sections at once since lectures are always a week ahead of the homework.
- I try to attend lecture as often as possible. (I think I have missed 4 days). When I don't attend lecture I feel lost when I try to do the homework.
- 90% of the time. Its useful to just see worked out examples.

- 90% of the time because it is useful to hear Professor Brown go over the material conceptually. On the other hand, I understand why some would choose not to attend lecture regularly as many do not find it useful for actually solving questions which, in a course that has exams primarily centered around being able to compute answers as opposed to explain what is going on, is the only relevant skill necessary for a high grade. When I do not attend lecture it is because I've slept through my alarm.
- 90% of lectures thus far. The only reason I could make the other 10% was because of illness.
- I've only skipped maybe 2 or 3 classes because I wasn't feeling well/overslept, but I try to attend lectures because they clarify the chapters in the book.
- Almost every class.
- I have missed two or three lectures due to my laziness getting out of bed. The lectures are very insightful and Dr. Brown presents the material from the textbook with his own perspective that sheds new light on how to approach the problems.
- Twice a week, to take notes on the given sections.
- I attend all lectures.
- Almost all of them except for when I was sick because I can't justify skipping class for no reason at all.
- Almost every class.
- Almost all the time—I only miss when i am too sick to attend—I think 2 times.
- I have attended lecture all but 3 times. I try to attend as much as possible but cannot make it when I have too many exams that week.
- I have attended 60% of the lectures because I feel overwhelmed by the material presented in class. I find myself fervently writing down the notes on the board with more attention than the actual material. I have to go back home regardless and end up self-teaching the material.

Rarely

• Rarely. I find that the lectures are too conceptual and wordy and it's easier to read the book to understand theorems and definitions. There are not enough applications or examples of the concepts in class. They are not that helpful in completing the homework.

How often do you attend the TA sections and why?

Always

- I've attended all TA sections, mostly to get homework, sometimes to listen to others' questions.
- I attend all the TA sections because our TA gives us helpful feedback about the homework and also rehashes important concepts.
- I go to all of the TA sections because they are useful in helping me review the material and go over problem solving methods.
- I attend every section because it helps to clear up some of the things I missed sometimes.
- I attend every section because my TA, Alex Grounds, does a host of example problems and is very versed in the material. He is also open to questions.
- I attend all sections. Some of the problems discussed in section are helpful when doing the homework problems.
- Every time, so that I can get my homework back, see my grade, and ask any questions I might have about this weeks homework.
- All the time because the TA goes over tricky homework problems from the homework that was due the week before. The TA also allows us to ask questions about current homework problems.
- Every section, to get feedback on my work and to clarify things from lecture.
- I attend my TA sections every time because I need my homework back.
- I attend TA sections every week to receive feedback on my homework and get extra help on homework problems.
- Always. They are helpful sometimes, but not always.
- Every week, because I find them more helpful than lecture!
- Almost always, because it helps.
- I attend all TA sections to get my homework, ask questions about the homework, and work through problems to help me better understand the material.
- I attend all TA sections. I believe that they do help, since Chris (section 1) makes an effort to not only do problems but to also explain the concepts in a way we can understand.
- I go to every one and for the same reason as above. Also I need my homework back and TA Grounds is actually very proficient in explaining confusing material.
- Always.
- I attend all TA sections; I find the extra explanation useful when trying to grasp the material.
- I always attend section, and it is always useful.
- I also try to attend every TA section. Going over difficult example problems and reiterating techniques taught in class help me to better learn the material.
- Always.
- I have attended every TA section because I would like to get my homework back and be able to review the materials taught in class and go over examples.
- Every time. They are usually helpful. I pick up homework.
- All the time, the TA is amazing. She goes over problems similar to the homework upon request as well as problems she thinks will be useful. Section truly helps me understand the material. Sometimes I wish section was longer.
- I attend TA sections every week because Kalina is an excellent TA who assists me in understanding the concepts better. She divides the class time up so that in the beginning, we go over homework material that a lot of people missed, and then go over some general concepts of the new material, and then lastly go over some extra problems on the new material. She also answers questions that people have on the assigned homework, which is helpful. All the 50 minutes of the class time is used very well and I learn a lot from her.
- Every time, because I like to see specific examples being done in front of me.
- I go every week because I like the problems he does in front of us and I get my homework back.
- Every week, but generally just to pick up homework. The section before the exam was helpful though.
- I always attend section so that I can work through a few more example problems, have to concepts explained from the TA's point of view, and to get my homework back.
- Always.
- I go to every section. The lectures pretty much prove the theorems, but the sections explain how they work and I understand more from the sections.
- I attend all the TA sections to get my homework back, and also to get additional information on topics that I didn't really understand during lecture.
- I have attended every TA section because my TA is helpful and explains concepts that I didn't get at first, as well as helps figure out homework problems that are difficult to understand.

- I attend TA sections every week in order to learn the mechanics of the homework.
- Every section. He explains the material with a more practical approach to solving problems.
- Every week. Even if they don't seem very helpful at the time, I would regret not going just in case I missed something helpful.
- I attend every TA section because I find that it is a good way to check over my homework and ask homework questions before I turn it in.
- I go to every TA section to get help with my homework and sometimes get questions answered that I never would have thought were questions to begin with.
- I attend the TA sections every week because they serve as a very useful supplement to lectures for me. I also like getting the feedback on my homework. Something about having the material explained in a second way really helps to solidify it in my mind.
- I have attended all but one of the TA sections. The one I skipped was to study linear algebra. I have mixed feelings about the TA sections. On the days when we do problems just like the homework, it feels a little bit like a waste of time, as I could be doing homework problems and getting just as much out of it. However, when the TA teaches us the computational aspect of the concepts discussed in lecture, I feel like I have learned a lot. I understand that the hw problems and those like them are designed to do this, but I have found it far more helpful when the TA walks us through a computation vs. putting a bunch of problems on the board and telling us to get in groups and do them. In addition to this critique, I do want to note that the TA is very helpful when asked an individual question, and he has a very clear teaching style. He also seems to care about our success, which is always appreciated.
- I have attended every TA section because Kalina not only has mastered the material she teaches, but is able to convey the material to our section on a simpler level which is very important.
- I have been to every TA section. Most of the time the TAs go over example problems which are great examples of how to approach the homework.
- I've attended section every week. Going over the homework is helpful and I think we TA does a good job encapsulating the week's material.

Most of the Time

- I have only missed 1 (out of town).
- Most of the time so I can get clarification for certain types of homework problems.
- I've only missed one TA session; I try to attend them more regularly because some concepts are clarified there more concretely.
- Mostly, to get homework back.
- I have attended all of my TA sections except one class. For me, sections seem to be a little more helpful in terms of solving homework problems. There are more examples that correlate to homework problems than the material covered in lecture.
- I attend the TA sections almost every week unless I feel that I understand all the material and do not need help on the homework set.
- I have attended most of the TA sections for the same reason I attend the lectures. I want to see the material presented in different ways so that I can picture the concepts in different ways and find one that is easiest for me to "get."
- I attend most of the TA sections primarily to get my homework back. I don't find the TA sections particularly helpful since we usually go over problems but I personally haven't had a sufficient amount of time to do problems on my own to more easily grasp concepts. That's more of a time issue.
- Most of them I attend except for when I had a review session for another exam the following day.
- I miss one a month. Time conflicts.
- I try to attend TA sections as often as possible. I have missed two days, but that is because I have a lab prior and it ran over. As for why I attend TA sections, they help me understand the material without the proofs and convoluted theories. In my mind they are like "Linear Algebra Cliff Notes."
- 90% as the TA works through homework problems and ones we might see on exams and emphasizes which topics and concepts are likely to appear on the exam.
- I try my best to attend every session and have so far missed one only.
- I attend TA sessions when I don't understand something.
- I attend most sections in order to get my homework back and see what I have missed.
- Almost every class.
- Almost always—I accidentally napped through last weeks but that's the only one I've missed. I find them really helpful for solidifying concepts covered in the homework for the week.
- Almost always, because it helps.
- Whenever I have major questions on the material.
- 75% of the time. Homework problems gone over are relatively easy.

Rarely

- I have not attended TA section since the beginning of the semester. Usually we go over homework problems which is not helpful for me since I have finished the homework before section, or we do practice problems, which are just like homework problems actually.
- Not very often because I had to choose an inconvenient time. I would like to be able to attend section more often.
- 25%. I usually only attend if I didn't do as well as I would have liked on the homework.
- Every so often, to get my homework back, but I do not find them very extremely helpful.
- I have attended about half of the TA sections. When I do go to them, they are quite helpful. I often times get a but lazy about doing so.
- Every other week usually. I go solely to pick up my homework.

Any other comments about the course?

Constructive Comments

- I would really appreciate more examples in class and during section. Also, my TA often times does not seem to have a coherent plan for our section.
- It would be helpful if the lecture notes were posted before the lecture occurred. This would allow for additional information to be added to them while in lecture.
- Don't give homework due the day of test. Meant I had 4 assignments and two midterms that week.
- The homework takes a very long time for me to complete. Like 5 hours per week, plus the time it takes me to get help on the problems I don't understand. I'm not sure that's normal/intended. Also, I find it very annoying that some problems are graded, while others are note. That basically makes me feel like I don't get credit for 75% of the work I do. It would be better if some problems were required, and all graded, and some were optional and discussed in section. That way, we know what problems to concentrate on, and don't have to send lots of extra time struggling on problems we don't even get credit for doing... Otherwise I think the class is going well. Sometimes I have no idea what's going on, but overall these concepts make sense.
- I think it would be more useful if we did more of a variety of examples in class to better prepare us for the homework because the current examples that we do in class are much easier than the homework and makes it much harder to do.
- I hope there will be sample test for us to prepare for the exam.
- TA office hours would be more convenient if they were later in the week, closer to when homework is due.
- Can the lecture notes possibly be posted prior to the lecture so that we could preview the material and follow along on our electronic devices?
- I wish lecture was spent doing more examples and applying the concepts. I find it too theoretical and abstract, and I don't find lecture notes helpful when doing homework.
- It might be helpful to have the notes for the class (if possible) available online before class starts since that way, I can spend more time on understanding the concepts rather than simply copying them down and dividing my attention.
- I think the most helpful thing for me would be to get more feedback on homework questions, more than the few that are actually graded. I found that, when studying, I could only count on doing homework problems to really help when looking at the problems the TAs actually graded because otherwise I wouldn't know if my thought process was even correct.
- Personally, I thought the first exam was too long. I know how to find coordinates in a different basis but I felt guilty about going over time and handed it in without starting the last five point question. Also, I think you should enforce the "pencils down"; rule since it felt incredibly unfair for me to hand in my exam uncompleted while there were at least thirty other students still working. And I only needed like thirty seconds to answer that last bit and boost me closer to the average... But overall I like lin alg right now. It's comprehensive but not intensive. The course is also well organized with various resources I have yet to reach out for.
- From what I hear, different TA's grade homework very differently and I hope that is accounted for when final grades are made. Besides that I enjoy the class.
- I wish there would be more examples done in class on how to solve problems in addition to the conceptual ideas, definitions, and theorems.
- For me, lecture is really confusing. I do enjoy the examples, but the theory aspect confuses me more than it helps. More than once I have pre-read the section, thought I understood it, came to lecture and thought that lecture was on a completely different section. But, alas, it wasn't. Personally, I would like to see more about how to get into the problem solving mindset linear algebra requires. I think it would make the harder homework problems easier (the ones usually at the end of the set in the higher number range).
- Need more example problems in class lecture.
- The homework seems to be graded extremely unfairly, and many times I have compared answers on my homework that have received heavy mark-downs with answers on my friends' homework's with other TA's, only to find that we gave essentially the exact same reasoning and solution (which were all correct and accurate), but they got full points while I only received half credit because I wrote an extra sentence that was only partially correct. I was told that if I had not written those 5-6 extra words on a few of my homework problems, I would have received full credit, which to me does not seem fair. At the very least, homework grades should be curved according to sections or TA's, and not as a whole for these reasons.
- Sometimes students ask questions in lectures pretty quietly and I can hear your answer but not the question. Can you repeat questions loudly when they are asked?
- All of chapter 4 is just way over my head. Is there any way we can review it a little more? The concepts are just difficult for me to visualize.
- Kalina Micheva is an excellent TA and is very helpful in explaining more complicated aspects of the class. I think it would be helpful if the times that each TA has scheduled in the Math Helproom were posted somewhere because I cannot go to the Math Helproom when my TA is there.

- Although I like the lecture style, I am not the biggest fan of the book. The book does a fairly good job explaining the concepts, but I have been having a hard time with its examples and demonstrations of computation techniques. The examples in the book tend not to include all the complexities of most of the hw problems, which makes it a little harder to keep up when the lecture is mostly theory and concepts. (To be clear, I like the lecture this way, I just wish the book had better examples of calculations) Also, it would be helpful if the homework problems kept up better with the lecture. I understand that they are spaced so that they can all be done on the day they are assigned, but this means that it has usually been at least a week since the lecture when I go to do the homework on a topic. If the hw problems were available ahead of time, they could be done closer to the lecture, so that doing the computations would reinforce the concepts. Finally, one of the biggest challenges for me in this course has been understanding the notation. It may be because this is my first college math course, but it has been difficult to keep up with. If every now and then we just reiterated what the newest piece of notation meant after writing it on the board, it would help a lot. Lest these comments be misinterpreted, I did want to add that I am learning a lot and that I do enjoy the class. Also, anything I mentioned here is just a suggestion, and I fully understand that there may be a good reason for doing things the way they are that I have not thought of.
- If there was some way that students could have extensive exposure to tests similar to actual tests written by Professor Brown despite this being the first rotation of Linear Algebra, that would be great. Homework problems are nice reference, but I believe a plethora of old tests (as in Organic Chemistry) would be much more helpful.
- It would be great if less points were taken off for "unclear" procedures for HW or if what needs to be explained for each problem type was explained beforehand. What I consider is an obvious step in the homework that does not require further explanation may not be one for the TA. As a result, most of my HW points were taken off not because I did not know how to do the problem but because I did not know what steps needed to be explained in detail.
- The material is very conceptual, which I like, but I need time to let it soak in. I wish Dr. Brown would talk and explain the concepts before he writes it on the board (especially at the beginning). The class has homework problems that seem a bit tedious/busy work at times.
- I definitely agree with doing more example problems during class. Writing down all the theorems and stuff is helpful but we could also just look at it in our own time with the book. Doing examples is the most helpful thing to figure out how to apply the theorems and that's a lot harder to do on your own.
- It would be helpful to have more concrete examples and clearer and more concise explanations of the very theoretical concepts.

Positive Comments

- I really like this course and I am debating about being a math minor because of it.
- I enjoy coming to class. Both Professor Brown and Kalina have been the most passionate and thorough math teacher/TA I have had at Hopkins. The material is very abstract, and thus sometimes confusing. Despite the confusion, you both do a great job in trying to illustrate the materials as best as possible. Class is certainly not always easy, but you both do the best job out of anyone I have had here in the math department. I really appreciate all of your help.
- I really enjoy the course!
- This is a more conceptual math course than most others, and, while I truly enjoy how it makes me think, it is certainly taking longer to wrap my head around some of the ideas.
- TA office hours have been more helpful than lectures and sections for me.
- It's definitely getting easier to understand- the first few chapters were particularly hard during lecture because of the use of unfamiliar notation. The wording in the book, though, is still a struggle because it's so darn technical.
- Prof. Brown has been the nicest and clearest math professors I've ever had and I think that, regardless of how I do, I'll remember the course fondly because he was teaching it.
- Even though I did not score as well as I wanted to on the exam, I think that working harder by continuously solving more problems and attending every lecture will eventually help me really grasp the concept of Linear Algebra. I think the professor and the TAs for this course are really great. I hope to feel accomplished by the end of the course.
- The professor is helpful and passionate
- Overall, I think it's a pretty good class and don't have any complaints that are worth noting.
- I really enjoy this class! I like that it can be related to problems I will encounter in the future and in the real world.
- I've enjoyed the course so far. I already took Calc III and Diff Eq last year, so I feel pretty comfortable with the material in this class.
- Dr. Brown, I really like your teaching style. You keep the lecture interesting, and I can tell that you are very passionate about mathematics. Also, I believe you are very fair in grading/difficulty of problems.

Other Comments

- It's very abstract. I find that reading the book is most helpful resource I have.
- It is a difficult course, but simply due to the complexity of the material.
- I don't think that the exams problems are too hard but I do think that the last exam was a bit too long.
- The exam seemed a little long. It was very difficult to finish within the allotted time and I was unable to really check any of my work.
- The material is not very difficult, but the textbook is horrible, and Professor Brown moves too quickly in lecture (I barely have time to copy notes, much less digest the material at 10am in the morning). On the other hand, Professor Brown is very methodical with teaching his concepts, and he teaches well- he just teaches too quickly, which is why his scanned notes are helpful, although they make going to lecture appear a little pointless. Also, the midterm was graded a bit too harshly, considering that there were no proofs.
- I really do not enjoy the course, most likely due to the subject material, but also perhaps due to the way it is taught.
- I only go to section to see what we need to over-explain as to minimize the points we get taken off on each homework.
- The professor and TA's constantly talk about writing out your process and explaining your approach to the problem, and asked this of students for the exam. But with only 50 minutes to finish the exam, this was very unfair. I spent time explaining each of my steps because the TA grades extremely harsh, and completely ran out of time on the later problems. It's fine to expect students to explain work on hw but if you want the same effort on the exam, 50 minutes is an unfair time constraint. I spend roughly 6 hours doing the hw weekly (getting about 26 out of 30 avg), so 50 minutes for a 12 part exam is very unfair.
- I think the course is very fair besides the fact that the homework is graded somewhat harshly.
- TA section 2 is held in a room where it is extremely hard to breathe with asthma which makes it difficult for me to go to section and to pay attention when I am there.