

# Linear Algebra

## Fall 2015

**Professor:** Dr. Heather A Moon

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**TA:** Morgan

**Book:** *Linear Algebra* Jim Hefferon (pdf at: [joshua.smcvt.edu/linearalgebra](http://joshua.smcvt.edu/linearalgebra))

### What is Linear Algebra?

This class is essentially the most useful math class you will ever take! This is not just my opinion, but it is an opinion held by most mathematicians. Linear Algebra just happens to be full of tools that are useful in almost every area of mathematics. This class is pretty much awesome. Don't be fooled into thinking that this class is a theoretical class. There are some really interesting applications that we will see in this class. I mean, we are going to experience real-life cutting-edge research applications that can be tackled using Linear Algebra! This is an exciting course and I want to invite you to join me in this excitement. I hope you find it as exciting as I do.

### What do I expect from you?

I expect you to want to learn. I expect you to keep an open mind about what we talk about. I expect you to do your own work. I expect you to collaborate with your classmates. I expect you to participate in class. I expect you to ask questions and to answer questions. I expect you to talk to the TA and to me about issues and class struggles. Really I expect you to learn.

### What can you expect me to do?

You can expect me to be enthusiastic about this subject. You can expect me to ask you questions. You can expect me to answer your questions by asking more questions. You can expect me to help you become a lifelong learner. That's really what I want to do for you in this class.

### What are the traits of a lifelong learner?

Here's what I think about this question. I think a person who wants to be a lifelong learner should get used to answering questions even if they aren't sure if it is a correct answer. Lifelong learners ask questions that go beyond looking to get homework done or exam prepped. Lifelong learners seek understanding not answers. Lifelong learners try to find applications (theoretical or real-life) to the topic they are learning. My goal is to get you there.

### Classroom Expectations

Respect is important in a classroom to facilitate discussions. I expect that some of you will answer wrong at times. That's awesome and I welcome wrong answers. We can learn from them. I don't want people answering quickly. Give your classmates a chance to think about my questions. If you know the answer right away and you know it is correct, wait. Respect your classmates by letting them think. If you think you know the answer, but are not sure, feel free to try sharing it. If it is wrong, we will use it to learn. Wrong answers are the best way to clear up misunderstandings and everyone can learn from them. Quick correct answers help nobody.

### **How will I measure my expectations?**

I will give you two midterms (15%) and a final (25%). I will also give you homework and labs (40%). Finally, I will expect you to participate in class (5%).

### **Now for some housekeeping...**

Plagiarism and cheating are not tolerated in this class. I will ask you to do things that have already been done. Using someone else's work is considered both plagiarism and cheating. Do not look up answers online. Do not use the solutions you may find online. Do not copy your classmates' work. If you get help from me, you are not allowed to copy my work either—you have to reformulate what you learned in your own words. Receiving or giving help on an exam in any way is cheating. In our department we don't take lightly academic dishonesty. Our goal is to help you learn and academic dishonesty goes against our goal for you. If you are ever in doubt as to whether your actions may be violating the academic dishonesty policy, please ask me before submitting your work.

### **Accommodations**

Any student with a disability requiring accommodations in this class is encouraged to contact me after class or during my office hours. Students with a disability may also wish to contact William Howard in the Office of Academic Services, Glendening Hall, suite 230, x4388.