

**Math 213**  
***Elementary Linear Algebra***  
**Fall Semester 2022**

**Professor:** *Vianey Villamizar*

**Section 8:** MW 3:00 - 3:50 p.m. in JKB 3104

**Office:** TMCB 318

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**Web page:** [www.math.byu.edu/~vianey](http://www.math.byu.edu/~vianey)

**Office Hours:**

**Monday 1:00-2:00 p.m.** 318 TMCB **Friday 12:00-1:00 p.m.** 318 TMCB

**Problem Session Wednesday: 4:30-6:00 pm** MathLab 155 TMCB

**Text:** *Linear Algebra: A Modern Introduction* by David Poole, 4<sup>th</sup> Edition, 2015.

**DO NOT PURCHASE THE BOOK!!!** We have negotiated a special price with the publisher for access to both the online ebook and the online homework system WebAssign. You will be given immediate access to the ebook through WebAssign (see below for instructions on enrolling in WebAssign). You will automatically be charged \$70.75 through your university student financial account for the ebook and WebAssign access after the add/drop deadline, unless you opt out.

**Learning Objectives:** A major goal for the students enrolled in this course is to master computations with the objects of linear algebra, as well as to develop critical thinking and logical inference. You should study two to three hours per class hour. During this time, work on your homework and read the material to be covered in the next class period. Not all material can be presented in class in which case students are responsible to learn it on their own. Solving homework problems for every class period is a key to understanding the subject. I support the statement that “Linear Algebra is only learned by doing.” Linear Algebra plays an important role in many disciplines today. I believe that my role as your instructor is to help and assist you in the process of learning mathematics. I will do my best to fulfill this role. I know that we will enjoy this class as we go along by making a consistent effort throughout the semester. It is best worded in the D&C language: *And now, if your joy will be great with one theorem that you learn and know how to apply, how great will be your joy if you learn many theorems.*

For more details visit the **learning outcomes** for this course at  
[https://math.byu.edu/wiki/index.php/Math\\_213:\\_Elementary\\_Linear\\_Algebra](https://math.byu.edu/wiki/index.php/Math_213:_Elementary_Linear_Algebra)

**Attendance:** This is an in-person class. I will not have recording or remotely access for the classes.

**Homework:** Homework for this course consists of online homework and written homework.

**WebAssign Online Homework:** For the online homework, you should register with the online homework system

**WebAssign:** <https://www.webassign.net>

To enroll in WebAssign and gain access to the ebook, see the instruction page at the end of the syllabus. Please note that you **do not** need to purchase a WebAssign key for this course, and that there is **NO** physical book to purchase at the BYU Store (you will be billed directly to your student financial account).

Homework problems are drawn from the exercise sets in the book. **For best learning complete as much of the online homework as you can before the lecture. It could take as little time as half an hour.** You will have until 11:59 pm to complete the online homework for the dates indicated in the online WebAssign homework schedule.

**Written Homework:** Approximately half of the homework is in written format. You must have received email with indications of your account in Gradescope. If not you can create your account at

**Gradescope:** <https://www.gradescope.com>

PLEASE, USE THE SAME email ADDRESS IN THE GRADESCOPE MESSAGE THAT YOU RECEIVED. Gradescope will allow you to upload your handwritten answers for your homework. Just follow the Gradescope procedure described in its webpage. You will have until 11:59 pm to complete and upload your written

homework for the dates indicated in the homework schedule. Make sure you reserve enough time (20-30 mins.) for the uploading process.

Solutions to exercises should be clearly written and adequately explained. In other words, it is insufficient just to write down the answer. **Late homework won't be accepted.** To make up for this your lowest two written homework section grades will be dropped. This policy will take care of any extraordinary circumstances as for example a minor sickness, a wedding, and others. If you experience extended illness, injury, hospitalization, or other major disruption during the semester and cannot complete your work please speak to your instructor. Special accommodations may be able to be arranged on a case-by-case basis.

Discussion of homework assignments with your classmates is encouraged, but you should keep in mind that homework is an individual work. Everything you turn in should be in your own words and you should thoroughly understand everything you write down. Homework problems to be graded will be chosen among the whole set of problems. Incomplete homework will receive partial credit according to the amount of problems worked out.

**Midterm Exams:** There will be two midterm exams on the following dates:

- Midterm 1 – Wed October 5-Fri October 7 (late day October 7, covers sections 1.1-3.3)
- Midterm 2 – Wed November 9-Fri November 11 (late day November 11, covers sections 3.5-4.4)

Each midterm will be held in the Testing Center.

**Final Exam:** The final exam will be cumulative and held during the final exam week.

- Final Exam - December 12-16 in the Testing Center.

The questions will be similar to those discussed in class, or those assigned as homework. A good understanding of the concepts and techniques is a key to success. The best way to prepare for the exams is to go over the homework problems and the examples worked in class (they constitute your best study guide) and then try to solve related problems that you haven't seen before. **. If you can reach the point where you can do fresh problems without help in all sections, I can anticipate that you will be able to successfully solve all problems on the midterms and final exam.**

Make up exams cannot be arranged except in case of an emergency. **Exam dates will be strictly enforced.** Only basic scientific calculators (no graphic or symbolic ones) will be allowed in all exams. No books and no other notes will be allowed.

**Grading:** Grades will be based on cumulative points earned as follows:

**Written Homework 20%, Online Homework 15%, Midterm 20/20 %, and Final 25 %.**

At the end of the semester, I will make an average based on each one of the above forms of evaluations with their corresponding weights. Then, a Gaussian curve will help me to determine your final grade. In any event, the Gaussian curve will not hurt your grade. I will guarantee the following letter grades:

B+ = 89-87%,		C+ = 79-77%,	D+ = 69-67%,	
A = 100-93%,	B = 86-83%,	C = 76-73%,	D = 66-63%,	E = 59-0%
A- = 92-90%,	B- = 82-80%,	C- = 72-70%,	D- = 62-60%,	

Keep in mind that a good grade is the end result of a good learning process. All of you can get a good grade by successfully experiencing this learning process

**Honor Code:** In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and my own expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

**Sexual Harassment:** Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity that receives federal funds. The act is intended to eliminate sex discrimination in education and pertains to admissions, academic and athletic programs, and university-sponsored activities. Title IX also prohibits sexual harassment of students by university employees, other students, and visitors to campus. If you encounter sexual harassment or gender-based discrimination, please talk to your professor or contact one of the following: the Title IX Coordinator at 801-422-2130; the Honor Code Office at 801-422-2847; the Equal Employment Office at 801-422-5895; or Ethics Point at <http://www.ethicspoint.com>, or 1-888-238-1062 (24-hours).

**Student Disability:** Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability, which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.

**Respectful Environment:** "Sadly, from time to time, we do hear reports of those who are at best insensitive and at worst insulting in their comments to and about others... We hear derogatory and sometimes even defamatory comments about those with different political, athletic, or ethnic views or experiences. Such behavior is completely out of place at BYU, and I enlist the aid of all to monitor carefully and, if necessary, correct any such that might occur here, however inadvertent or unintentional. "I worry particularly about demeaning comments made about the career or major choices of women or men either directly or about members of the BYU community generally. We must remember that personal agency is a fundamental principle and that none of us has the right or option to criticize the lawful choices of another." President Cecil O. Samuelson, Annual University Conference, August 24, 2010 "Occasionally, we ... hear reports that our female faculty feel disrespected, especially by students, for choosing to work at BYU, even though each one has been approved by the BYU Board of Trustees. Brothers and sisters, these things ought not to be. Not here. Not at a university that shares a constitution with the School of the Prophets." Vice President John S. Tanner, Annual University Conference, August 24, 2010

### **Register for Your WebAssign Course**

Enroll in your *WebAssign* course in 3 easy steps:

1. Log into your Canvas account and click on the link for this course (you will not need a course key to register for *WebAssign*).
2. Click any link to Cengage content to continue the registration process. Your Cengage course materials will open in a new tab or window, so be sure pop-ups are enabled (see the 'Disabling Your Pop-Up Blocker' section below to learn how!)
3. Link your Canvas account to your Cengage account. If you don't yet have a Cengage account, you can create one by clicking 'Create an Account'. We highly recommend using your school email address!

*Still need help registering for your **WebAssign** course materials or have questions? Watch the video provided below or attend one of Cengage's student office hours at the below times.*

[Watch this video to register for WebAssign in Canvas.](#)

**Do you need help with accessing the course? Visit our Zoom office hours August 15th - September 26th. We will be closed on Labor Day.**

**Zoom Link:** [CLICK HERE TO JOIN](#)

**Dates & Times:** Weekdays, August 15 - September 26, 1-3 pm MST