DeAnza College

Spring 2024 MATH 2B –20 TTH 4:00 – 6:15 MLC113

Instructor:	Linlin Zhang **Email**: zhanglinlin@fhda.edu **Canvas:** https://deanza.instructure.com/
Text:	**A First Course in Linear Algebra by Lyryx** Please follow the link and download the PDF file to your computer. **MyOpenMath** is a free homework platform embedded in Canvas.
Equipment:	**A scientific or Graphing Calculator is required** (We need the **Matrices** features) During lesson, you can use your phone: **TI Emulator Apps** For iPhone: GraphNCalc83 (free with ads) For Android: Graphing Calculator plus 84 83 ($2.99)
Office Hours:	**MLC 113 TTh 6:15 – 6:45PM or email me for appointments**

1. **Prerequisite:**

Prerequisite: Mathematics 1D or equivalent (with a grade of C or better); or a satisfactory score on the College Level Math Placement Test within the last calendar year.

2. **Course Description:**

- Solve and analyze systems of linear equations using matrices and matrix theory.
- Investigate special matrices and matrix operations including powers and factorization.
- Develop understanding and use of n-dimensional vectors and vector operations.
- Define and investigate vector spaces and vector sub-spaces and find their bases and dimensions.
- Establish understanding of linear transformations and their geometry and find their matrix representation.
- Define eigenvalues and eigenvectors and use them to diagonalize square matrices and solve related problems .
- Utilize methods of linear algebra to solve application problems selected from engineering, science and related fields.

3. **Student Learning Outcomes:**

- Construct and evaluate linear systems/models to solve application problems.
- Solve problems by deciding upon and applying appropriate algorithms/concepts from linear algebra.
- Apply theoretical principles of linear algebra to define properties of linear transformations, matrices and vector spaces.

3. **Drop Policy:**

Attendance is integral to your success in this course. I expect you to attend all class meetings. **It is always YOUR RESPONSIBILITY to drop** the class if you feel like you can't continue for any reason.

4. **Tutoring**

   The Math, Science, and Technology Resource Center **(S43)** provides free online tutoring **Monday – Thursday 10AM – 5PM**. For more information, go to www.deanza.edu/studentsuccess/mstrc You can also use "NetTutor" link on the navigation in Canvas or attend my office hour. Email me for appointments if you want to meet at alternative time.

5. **Academic Integrity:**

   All tests are allowed some notes, but your work must reflect what you know based on your own knowledge and thought. Referencing or copying another student's solutions, or searching answer online during tests are considered cheating. Violation of this policy will result in the student receiving ZERO credit for the entire assignment or test. Further action may be taken depending on the circumstance.

6. **Support Services**

   Students with disabilities needing reasonable accommodation should inform me in the beginning of the quarter. To begin the reasonable accommodations process, I will need to fill out a request form from the Disabilities Support Services (DSS). For more information, please visit the DSS office at SCSB 141, call (408) 864-8753 /(408) 864-8748 TTY, or go to www.deanza.edu/dss.

7. Grade:

All grades will be posted on Canvas as soon as they become available. It is your responsibilities to check Canvas at least once a week to monitor your grades for the class.

In Class (drop 2)	10%
Homeworks (drop 1)	15%
7 Quizzes (drop 1)	15%
2 Exams	40%
Final Exam	20%
Total	100%

A: 90-100%
B: 80-89%
C: 70-79%
D: 60–69%
F: 0-59%

In Class Participation

Each lesson has in-class practice near the end. You will complete the handout and turn them in. Keep in mind that your problems are very similar to the ones I do, but adapted with different numbers. In the events of absence, you will receive zero for the in-class. Two lowest scores will be dropped for overall grade calculation at the end of the term.

Homework:

Homework assignments are assigned from **textbook** or MyOpenMath test bank. You need to submit your answers to **MyOpenMath** (embedded in **Canvas**). Even I am not collecting work, you are supposed to work out the problems on your own paper.

Late Work Policy

Each student are given **6 late passes (5-day extension each)** this quarter. After a homework assignment is due, you should see a "late pass" button in the description of the assignment. If an assignment is due on 1/12, using one late pass will extend the due date to 1/17. After using all your late passes, you can complete an assignment in "**Practice**" mode, and there is a **15% penalty** when I record your grade later.

Quizzes:

Six Quizzes are proctored quizzes and will be given in the classroom on quiz days. Quiz problems are similar to homework problems and lecture examples.

Midterms and Final

Three midterms and ***one final exam*** will be given with opportunities of test corrections. Test correction opportunities will be available for midterms, not the final. Every test counts. You CAN'T drop any.

8. Class Calendar

Week	Month	Tuesday	Thursday	Notes
1	**April**	9 1.1/1.2	11 1.2/2.1	
2	**April**	16 **Quiz 1** 2.1	18 2.2/3.1	**Sat. Apr. 19h** last day to add. **Sun. Apr. 20th** last day to drop with no record.
3	**April**	23 **Quiz 2** 3.1/4.10	25 4.10	
4	**April**	30 **Quiz 3** 4.11	2 4.11/5.1	
5	**May**	7 5.2	9 **Test 1** **Ch 1 to Ch 4**	
6	**May**	14 5.3/5.4	16 5.5	
7	**May**	21 **Quiz 4** 5.6/5.7	23 5.8/5.9	
8	**May**	28 **Quiz 5** 7.1/7.2	30 7.3/7.4	**Friday, May. 31th:** last day to drop with a "W".
9	**June**	4 **Quiz 6** 9.1	6 9.2/9.3	
10	**June**	11 9.4	13 **Test 2** Ch 5 to Ch 7	
11	**June**	18 9.6/9.8	20 **Quiz 7** 9.9	
12	**June**	25	27 **Final Exam** **4 – 6 PM**	

Student Learning Outcome(s):

- Construct and evaluate linear systems/models to solve application problems.
- Solve problems by deciding upon and applying appropriate algorithms/concepts from linear algebra.
- Apply theoretical principles of linear algebra to define properties of linear transformations, matrices and vector spaces.

Office Hours:

In-Person	MLC 113	T	6:15 PM	6:45 PM
In-Person,Zoom	MLC 113	TH	6:15 PM	6:45 PM
Zoom	M,W		11:00 AM	12:00 PM