De Anza College – Spring 2022 MATH 2B-16Z Linear Algebra

Instructor: Paul Du, PhD E-mail: dupaul@fhda.edu Class: TTh 1:30–3:45 pm, Zoom

Office Hours: TTh 12:00–12:50 pm, Zoom

Prerequisite

MATH 1D or MATH 1DH with a grade of C or better.

Course Description

Systems of linear equations, matrix algebra, determinants, vector spaces, linear transformations, eigenvectors and eigenvalues, inner products, symmetric matrices and quadratic forms.

Textbook

Linear Algebra and Its Applications, 5th Edition, David C. Lay et al.

Calculator

A graphing calculator is optional for this course.

Tips for Success

- ► Participate actively in class.
- ► Work problems every day.
- ► Review old material constantly.
- ► Form a study group.
- ▶ Utilize tutoring and online resources.

Homework and Quizzes

Homework will be assigned for each lesson and will be due on each exam day. Students are responsible for solving all the problems assigned, showing all work in a neat and orderly manner. Simply giving answers without showing work will receive no credit. Homework will be graded on neatness, completeness, and correctness. Late homework will be accepted but will receive a maximum of half credit.

There will be six (6) quizzes given during the quarter. Quiz problems will be based on the homework and class examples. There will be no make-up quizzes under any circumstances. Instead, the lowest quiz score will be dropped.

Exams

There will be two (2) midterm exams given during the quarter. There will be no make-up midterm exams under any circumstances. Instead, the lowest midterm exam score will be replaced by the final exam score, if the latter is higher.

A mandatory comprehensive final exam will be given at the end of the quarter. The final exam must be taken at the officially scheduled time. Any student who misses the final exam will receive a grade of F for the course.

Late Submission Policy: All the exams shall be scanned and submitted in Canvas. It is the student's responsibility to ensure that the exam is properly scanned and submitted on time. A penalty will be applied to the exam score for a late submission: 10% deducted for up to 10 minutes late; 20% deducted for 10 minutes to 20 minutes late. Any submission more than 20 minutes late will receive no points.

Grading Policy

The course grade will be determined by the following criteria:

Homework	10%	[99%, 100%]	=	A+	[80%, 82%)	=	B–
Quizzes	20%	[92%, 99%)	=	A	[77%, 80%)	=	C+
Midterm Exams	40%	[90%, 92%)	=	A-	[65%, 77%)	=	C
Final Exam	30%	[87%, 90%)	=	B+	[55%, 65%)	=	D
		[82%, 87%)	=	В	[0%, 55%)	=	F

Attendance Policy

Students are expected to attend all classes, to be on time and to stay for the entire class period. Any student who misses more than one (1) class during the first two weeks or more than three (3) classes before the withdraw deadline may be dropped by the instructor. Each incidence of tardiness or leaving class early will count as half an absence. If a student decides not to continue with the course, it is the student's responsibility to officially drop the course. Failure to do so may result in a grade of F for the course.

Academic Honesty Policy

Students are responsible for keeping themselves informed of the De Anza College Policy on Academic Integrity (www.deanza.edu/policies/academic_integrity.html). Cheating will not be tolerated and may result in receiving a zero on the exam or an F for the course and being reported to the Dean of Students Office for possible disciplinary action.

Accommodations for Students with Disabilities

Students with disabilities who believe that they may need accommodations in this course are encouraged to contact Disability Support Services (408-864-8753) or Educational Diagnostic Center (408-864-8839) as soon as possible to ensure that such accommodations are arranged in a timely fashion.

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.