De Anza College – Spring 2017 MATH 2B-26 Linear Algebra

Instructor: Dr. Paul Du Class: TTh 4:00 pm - 6:15 pm, Room S16 E-mail: dupaul@fhda.edu Office Hours: TTh 3:00 pm - 3:50 pm, Room S43

Prerequisite

MATH 1D with a grade of C or better.

Textbook

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

Reference

Schaum's Outline of Linear Algebra, S. Lipschutz, M. Lipson.

Calculator Policy

A basic scientific calculator may be used on exams and quizzes. Graphing calculators and cell phone calculators will not be allowed on exams or quizzes.

Course Description

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

Student Learning Outcomes

Upon successful completion of this course, the student will be able to

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

Reading and Homework

Reading and homework will be assigned for each covered section of the textbook. Students are expected to read the assigned textbook sections on a daily basis. Homework will consist of two parts, ungraded practice exercises from the textbook and graded written assignments. Written assignments 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. Written assignments will be graded on completeness, correctness, and clarity. Late homework will be accepted but will receive a maximum of half credit.

Homework Format Requirement: Each written assignment must be printed out and completed (1) in the space provided for each problem (like a regular exam), (2) stapled together, and (3) in pencil or black/blue pen. Assignments that do not follow the format requirement will not be collected or will cause significant points to be deducted.

Participation

Students are expected to be actively involved in the classroom learning. Class participation will be graded based on attendance, asking questions, sharing solutions, and participation in classroom activities.

Quizzes and Exams

There will be four (4) quizzes given throughout the quarter. Quiz problems will be similar to (or taken directly from) homework problems. The lowest quiz score will be dropped. There will be **no make-up quizzes under any circumstances**.

There will be two (2) midterm exams given during the quarter. Students may bring one $3'' \times 5''$ index card (two sides) of handwritten notes to each midterm exam. The lowest midterm exam score will be replaced by the final exam score, if the latter is higher. A picture ID is required to take each midterm exam. There will be **no make-up exams under any circumstances**.

A mandatory comprehensive final exam will be given at the end of the quarter. Students may bring one $8.5'' \times 11''$ sheet (two sides) of handwritten notes to the final exam. A picture ID is required to take the final exam. Any student who **misses the final exam will receive a grade of F** for the course.

Grading Policy

The course grade will be determined by the following criteria:

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Participation	5%	A	=	90% – 100%
Homework	10%	В	=	80% - 89%
Quizzes	15%	C	=	70% - 79%
Midterm Exams	40%	D	=	60% - 69%
Final Exam	30%	F	=	0% - 59%

^{*}The instructor reserves the right to assign plus/minus grades for borderline cases.

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. 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

Students are responsible for keeping themselves informed of the De Anza College Policy on Academic Integrity (www.deanza.edu/studenthandbook/academic-integrity.html). Cheating will not be tolerated and will result in receiving a zero on the exam with the possibility of being reported to the Dean of Students Office for possible disciplinary action.

Classroom Behavior

Students are responsible for keeping themselves informed of the De Anza College Student Code of Conduct (www.deanza.edu/dsps/dish/appendix/conducts.html). Disruptive behavior in the classroom, including (but not limited to) talking during lecture, using cell phones or other electronic devices for non-class purposes, or repeatedly arriving to class late or leaving early, is unacceptable. Persistent disruption can result in being asked to leave the class and/or being referred to the Dean of Students Office.

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.

Additional Help

Math and Science Tutorial Center (S43) provides free individual and group tutoring. A useful online math learning resource is Khan Academy (www.khanacademy.org/math).

Hints for Success

- ► Read the book carefully.
- ► Work problems very day.
- ► Review old material constantly.
- ► Make flash cards.
- ► Utilize online resources.