

TPHS Linear Algebra ❖ SDSU Math 254

Ms. Abby Brown – Torrey Pines High School

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Course Description (from SDSU catalog)

Math 254. Introduction to Linear Algebra. 3 units. Prerequisite: Mathematics 151. Matrix algebra, Gaussian elimination, determinants, vector spaces, linear transformations, orthogonality, eigenvalues, and eigenvectors.

Note that SDUHSD students may meet the prerequisite by passing the Advanced Placement Calculus BC Exam with a score of 3 or higher. At TPHS, students should take Calculus III (Calculus D) before or concurrently with Linear Algebra.

Important General Information

There is a semester course fee of \$276 for SDSU credit. This is a reduced fee from recent years and now calculated at \$92 per unit. Beginning in the 2017-18 school year, students have the option to enroll through MiraCosta College for community college credits at no cost (MCC Math 270 Linear Algebra, 4 units). All students must enroll through either SDSU or MiraCosta. High school credits are optional. Details about payment and course credits will be explained in class. Registration is due in the early weeks of the semester.

Since 2001 many students have successfully transferred the SDSU credits earned at TPHS to their colleges and universities. However, the ultimate decision on transferability of credits from either SDSU or MiraCosta will depend on the policies of the college or university the student attends after high school.

Students enrolled through MiraCosta may have a few additional lessons, assignments, and/or assessments to fulfill the requirements of MiraCosta College. More details to come as they are determined.

Bring EACH DAY

- Pencil, Paper, Notebook (Recommended sections: Homework, Notes, Quizzes, & Projects)
- Book: *Elementary Linear Algebra* by Howard Anton, 8th Edition
- Recommended: Graphing Calculator, *Mathematica* on personal computer (days needed will be noted in class)

Guidelines and Expectations

- Respect
 - Each other (paying attention, letting everyone participate, etc.)
 - Environment (classroom, materials, furniture, **no food or drinks**, etc.)
 - Honesty: **The TPHS Academic Honesty Policy will be carefully followed and strictly enforced.** Note that students also agree to the Academic Honesty Policies of SDSU or MiraCosta when registering for credits through either institution. Those policies may be found on their websites.
 - Students should NOT take pictures or record video in class, whether during instruction, breaks, or other free time. Ms. Brown's policy statement on taking pictures is posted on the class website.
- Effort
 - Ask questions, have a positive attitude, be willing to try new things.
 - You must turn in work on time to receive full credit.
 - Work neatly and thoroughly.
 - Your work during class time must be for this class. **No phones unless directly related to this class.**
- Evaluation
 - Question the quality of your own work.
 - Is this work you would expect of a college student?
 - Let me, the teacher, know when something goes well or poorly or how I can help you learn better.

Tests

- All students should be in class on the day of a test. If you are absent:
 - I expect a note, e-mail, or phone call from a parent/guardian on the test day or soon after.
 - The absence must also be excused through the attendance office.
 - You will take a make-up exam as soon as possible and not more than one week after returning. Make-up exams may be difficult and different than the original test and may not have any bonus questions.
- During a Test:
 - No one will be excused to use the restroom. (Go before class.)
 - Ask for scratch paper if you need some.
 - All class materials will be clearly put away at the front of the classroom.
 - No cell phones, computers, or other electronic devices even after completing the test.
- Unauthorized collaboration is a violation of the Academic Honesty Policy.
 - Students may not discuss a test with anyone after taking it unless approved by the teacher.
 - Do not ask your friends about the test. This pressures them to tell you something they shouldn't.
 - Tests may vary by class period. However, sharing any information about the test is still not allowed.
- There are no re-takes for tests and no tests are dropped from grades.

❖ **The best thing that students can do for success is to** ❖
complete the full homework assignment before each class.

Notebook

- *Read* assigned section thoroughly at home.
- List all *vocabulary* with definitions.
- Write all *theorems*.
- Include any *other notes and examples* you feel would be most helpful.
- Copy problems for *exercises* and *show all work* in your notebook too.
- Assignments listed on the class website. Any changes will be announced in class.
- There may be random notebook checks in class.
- ***Students should be prepared to discuss and review assignments at the beginning of each corresponding class.*** If students fail to do this, points may be deducted from grades and/or homework procedures and policies may change.
- ***Even though grades are based on completion, students are expected to do their best to fully complete and understand each problem.***

Quizzes

- There will be approximately one quiz per chapter, and they are available on the class website.
- Quizzes are assigned as take-home worksheets and will be graded for completion.
- Quizzes will be discussed and are due in class the class period after they are assigned.
- Late quizzes will not be accepted.
- Students should use quizzes as an opportunity to assess current understanding of the material. Textbooks, course notes, and calculators should only be used after completing as much as possible on your own.

Projects and Computer Activities

- Students will give approximately two or three presentations to the class.
- There may be a final project to be presented at the Advanced Math Open House in the spring.
- Several different computer activities will be assigned throughout the semester. These are to be completed with the computer program *Mathematica*. Students can get *Mathematica* for free through the school district by following the instructions provided on the class website.

Course Topics

- For a detailed list of course topics, please refer to the “Course Outline” for the class corresponding to SDSU or MCC. This is available on the class website and/or Google Classroom.

Grades

80%	Tests (Two Exams 20% each + Final Exam 40%)	Note: The only “extra credit” in this course is a few bonus questions on tests.
20%	Notebook Assignments, Quizzes, Projects, Extra Activities, Participation, Presentations, etc.	
100%	Final Grade	

Grading Scale: Values represent lower cutoffs.

92.5% A, 89.5 A–, 86.5 B+, 82.5 B, 79.5 B–, 76.5 C+, 72.5 C, 69.5 C–, 66.5 D+, 62.5 D, 59.5 D–, 0 F

Note that MiraCosta College does not issue + or – marks along with letter grades. For example, a “B+” according to the grading scale above would be marked as a “B” for the final grade. SDSU grades include + and – marks.

Dear Students and Parents/Guardians,

This class is a unique opportunity for the students in the San Dieguito Union High School District. We are very fortunate to be able to award college credit to students who are successful in this course. I will communicate with you regarding the details of course fees and enrollment procedures as they become available.

Please note that, as a participant in a 3 unit college course, students are expected to spend significant, meaningful time outside of class working on assignments, reviewing material, and preparing for exams. One “rule of thumb” is that students should be committed to work toward mastery at least 2 hours per unit per week outside of class; that is 6 hours per week for a 3 unit course.

Also, as part of a standards-based curriculum at TPHS and throughout SDUHSD, students will be engaged in a variety of instructional strategies and assessments. In the past I have used presentations, interviews, pictures, project journals, reflective writing, peer critique, and video to record the progress of students’ learning and may incorporate some of these into this class. My goal is to enhance all students’ learning through reflective practice, a framework for learning that my colleagues and I have found motivating and effective. One of the strategies that I employ to cultivate my own learning as an educator is to share what I do in my class with others—teachers, administrators, parents, students, and professionals in and outside of the Torrey Pines High School community.

I am looking forward to this new semester with much enthusiasm. Each student will have the opportunity to explore new mathematical ideas and share what they have learned with others. If you have any questions or concerns, please contact me through the school at (858) 755-0125 ext. 2120 (voice mail) or abby.brown@sduhsd.net (e-mail preferred).

Thank You,

Abby Brown

Please continue to the next page.

Name: _____ Period: _____

Please print this page, sign the form below, and return this entire page to Ms. Brown.

I have read and understand the class description and agree to do my best to fulfill the requirements for Ms. Brown's Linear Algebra class for the semester.

I also understand that there is a semester course fee of \$276 paid to SDSU or the option without cost through MiraCosta. Registration details will be explained in class, and I will need to decide whether to earn credits through SDSU or MiraCosta and complete appropriate paperwork by the registration deadline at the beginning of the semester.

Student (print)

Signature

Parent/Guardian (print)

Signature