

Instructor:	Tamon Stephen
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E-mail:	tamon@sfu.ca
Meeting Time:	Monday, Wednesday, Friday 3:30-4:30 in SUR 3310
Open Lab Hours:	To be determined
Text:	Contemporary Linear Algebra by Anton and Busby
Grading:	10% Quizzes, 20% Midterm 1, 20% Midterm 2, 50% Final

1. **Syllabus.** Linear equations, matrices, determinants. Introduction to vector spaces and linear transformations and bases. Complex numbers. Eigenvalues and eigenvectors; diagonalization. Inner products and orthogonality; least squares problems. An emphasis on applications involving matrix and vector calculations.

We will cover most of the first four chapters of the text, and parts of chapters 5 through 8.

2. **Homework.** There will be weekly homework assignments during the term. Homework will not be collected, but you are encouraged to write up the homework yourself in a "homework journal". If you wish to ask questions to the instructor or TA's about the homework or otherwise, you should bring your homework journal with you to help us understand where you are having difficulties.

3. **Quizzes.** There will be weekly quizzes given in class. These will take about 10 to 15 minutes each and will consist of two problems from the most recent homework set or slight variations of them. You will be required to give full solutions, and the quizzes will be collected and graded. Your lowest quiz score will be dropped when calculating the quiz portion of your grade.

Books, notes and calculators **cannot** be used on these quizzes.

4. **Exams.** Books, notes and calculators **cannot** be used on these tests. Students **must** plan to take the tests at their scheduled times.

The tentative dates and times for the tests are:

Midterm I: Wednesday, October 4th, 3:30-4:20 PM (in class)

Midterm II: Wednesday, November 8th, 3:30-4:20 PM (in class)

Final: Saturday, December 16th, 8:30-11:30 AM

As you know, exams **cannot** be rescheduled due to travel plans. Please check now and let me know if you have back-to-back final exams on different campuses (e.g. Surrey and Burnaby). In this case arrangements will be made so that you can write both exams in one place.

5. **Drop Dates.** The drop date for students to avoid getting a WD on their transcript is **Monday, September 18th**. The final drop date for students is **Monday, October 9th** (which is a holiday). SFU maintains a list of important deadlines for students at:

<http://students.sfu.ca/deadlines/>.

6. **Academic Integrity.** Simon Fraser University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <http://www.sfu.ca/policies/teaching>).

7. **Religious Accommodations.** Students requesting religious accommodation must tell the instructor by the end of the first week of term.
8. **Materials on the Web.** Course information will be posted on the Math 232 Canvas page, to which you should have access during the term. See: <http://canvas.sfu.ca>.
9. **Reading.** There will be assigned reading. Please do it.
10. **Reserve Books.** There is a copy of the course text on reserve at the SFU Surrey library, along with the student solutions manual. Additionally Lay's *Linear Algebra and its Applications*, Leon's *Linear Algebra with Applications* and Strang's *Introduction to Linear Algebra* are on reserve. All three textbooks cover the same material as Anton and Busby, but the presentation is slightly different.

There is of course plenty of worthwhile material on the Web. For instance, Strang's personal linear algebra course (from a few years ago) is available from MIT. There are also various videos available on YouTube, such as those of the Khan Academy. These may be helpful to you as a supplemental resource, though do beware that they may sometimes use different notation. Usually people learn much more from an active approach, such as working exercises, than from a passive one, such as watching videos.
11. **Student Solutions Manual.** A student solutions manual that contains worked solutions to odd-numbered exercise is available for purchase from the publisher.
12. **Laptops.** As a courtesy to other students, please sit in the back row if you plan to use a laptop during the lecture.
13. **Operations Research.** Linear Algebra is ubiquitous in application in business and industry, the applications studied in this course are only a small sample. You may be interested in the Operations Research program which is based in Surrey.

Please see the instructor if you are interested in finding out more about this program.
14. **Questions.** Questions are encouraged in class and out.
15. **Office hours.** All office hours will be held in the Open Lab (OL). See below.
16. **Open Lab.** Teaching assistants will be available to help you in the Open Lab (OL). A schedule of hours will be posted on the course Canvas site. This is also where I will hold my office hours. The OL is located room 2985, Podium 2. The Open Labs will begin in the second week of classes (week of Sept. 11th). A schedule of instructors and TA office hours will be posted at the lab and on Canvas.

The Open Lab is an excellent place for seeking help.
17. **Math 240.** A more theoretical linear algebra course covering similar material is Math 240, which is offered in the Spring and Summer (in Burnaby). Note that students with credit for Math 232 cannot take Math 240 for further credit.

Have a great term!