

MATH 260: LINEAR ALGEBRA

Fall 2024: Section 1

<u>Instructor Information</u>		<u>Course Information</u>	
Name:	Dr. Christina Durón	Days:	MTRF
Email:	christina.duron@pepperdine.edu	Time:	2:00PM – 2:50PM
Office:	RAC 105	Location:	RAC 175
Office Phone:	(310) 506 – 4832	Module:	In-person

Course Pages:

1. Courses (Required): <https://courses.pepperdine.edu>
2. Grade.ly (Required): <https://app.grade.ly>
3. Homepage (Optional): <https://cduron.info>

Office Hours: Office Hours will be held regularly in RAC 105 on

- Mondays and Fridays: 12:30PM – 1:30PM
- Tuesdays and Thursdays: 10:30AM – 11:30AM
- By appointment

In addition, questions may be addressed through email between 8AM – 5PM (PST) during the academic week (i.e., Monday through Friday). Please allow up to 24 hours for a response, although the instructor will strive to reply promptly. Emails received over the weekend will receive a reply on the first University academic day (excluding any national, state, or University holiday) following the weekend.

Required Course Materials:

- *Textbook:* The course textbook (electronic or hardcover) is *Linear Algebra and Its Applications*, 6th Edition by David C. Lay, Steven R. Lay, and Judi J. McDonald. While the textbook is not required, it is an encouraged resource. Should you purchase/rent the textbook, it is important that you *read the sections in addition to attending lectures and doing assigned work*.
- *Calculator:* A graphing calculator is a tool that will be used in this course. Any model in the TI-83 or TI-84 series is recommended. These are to be used to aid computations, not as a crutch, and you are expected to know (and show!) how to do problems without these aids as well. Models that can perform symbolic calculations (also known as CAS), along with a phone, tablet, or any other WiFi device, are not allowed on exams and quizzes. CAS models include (but are not limited to) the TI-89, TI NSpire CAS and HP 50g. Students are not allowed to share calculators during quizzes and exams.
- *Software:* For this course, you will need daily access to a device with a reliable internet signal that can:
 - Access Courses.
 - Access Grade.ly.
 - Scan and upload written work to Grade.ly.
 - View and download PDF documents.

Course Communications: All course materials will be posted on Courses. Email, in-class announcements, and Courses announcements will be the primary methods to communicate course information. It is ultimately the student's responsibility to keep informed of any announcements, syllabus adjustments, or policy changes made during scheduled classes, by email, or through Courses.

Course Prerequisites: The enrollment requirement includes successful completion of or concurrent enrollment in Multivariable Calculus (Math 250), where successful completion requires a grade of C– or better.

Course Description: Math 260 provides an introduction to Linear Algebra, covering much of Chapters 1 – 7. Topics covered include systems of linear equations and linear transformations; matrix determinant, inverse, rank, eigenvalues, eigenvectors, factorizations, diagonalization, singular value decomposition; linear independence, vector spaces and subspaces, bases, dimensions; inner products and norms, orthogonal projection, Gram-Schmidt process, least squares; applications.

Course Objectives:

1. Demonstrate an understanding of the skills and concepts central to Linear Algebra.
2. Demonstrate the ability to apply appropriate mathematical ideas from Linear Algebra to both theoretical and practical contexts.
3. Demonstrate the ability to formulate logical arguments and proofs that make use of appropriate mathematical language and notation.
4. Demonstrate the ability to solve problems using the ideas of Linear Algebra including the ability to translate problems into mathematical notation and interpret solutions appropriately.

Student Learning Outcomes (SLOs): Upon completing this course, students should be able to:

1. Use Gaussian elimination to solve linear systems, find inverses, compute determinants, and determine the rank and fundamental subspaces associated with a matrix.
2. Give examples that demonstrate specific properties of linear systems, matrices, vector spaces, bases, linear transformations, and inner product spaces.
3. Construct proofs that verify a vector space or subspace, linear transformation, or inner product space.
4. Understand the relationships between span, linear independence, rank, dimension, and basis.
5. Understand the various properties that are equivalent to a matrix being invertible.
6. Find the kernel, range, and matrix representation of a linear transformation.
7. Calculate the eigenvalues and eigenvectors of a matrix and if possible, use them to diagonalize the matrix.
8. Understand the relationship between inner products, projections, and orthogonality, and use Gram-Schmidt to find orthogonal bases for a given set of vectors.
9. Use ideas learned in a variety of applications, including Markov Chains, least squares problems, and singular value decomposition.

Relation to Mathematics Program Learning Outcomes: A student who completes a mathematics degree should be able to:

- Formulate mathematical proofs that are clear, correct, complete, and logical (see SLOs 2, 3, and 5).
- Use appropriate mathematical ideas in applied or real-world contexts (see all SLOs).
- Integrate mathematical ideas from multiple courses to solve advanced problems (see SLO 9).

Relation to Pepperdine’s Mission: Pepperdine is a Christian university committed to the highest standards of academic excellence and Christian values, where students are strengthened for lives of purpose, service, and leadership. This course is designed to complement and supplement the overall mission of Pepperdine. Mathematics courses have historically been used to “train the mind” of students, to help students

think more carefully and clearly. In logical preparation and in application of concepts, the study of mathematics helps prepare you for a life of purpose, service, and leadership.

Attendance and Class Participation Policy: Participating in the course and attending lectures and other course events are vital to the learning process. As a result, students are expected to attend each class meeting and to arrive on time and ready to participate in discussion or group work with their peers. Students are responsible for the material covered if they are late or absent. If you are unexpectedly absent for medical or personal reasons, please inform the instructor within 24 hours, if at all possible, and provide a note from the appropriate party (e.g., doctor, Divisional Dean) excusing the absence.

Classroom Behavior Policy: To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a website, making phone calls). Students are asked to refrain from disruptive conversations during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion, and may be reported to the Divisional Dean.

Grade.ly: Students are expected to enroll in the MATH 260 course on Grade.ly using your @pepperdine.edu address and the course ID 90e6ebd1-1069-41ed-b3d2-1c50e661187e. To upload your work, log into your Grade.ly account, find the course Grade.ly page, select the correct assignment, and upload your scanned work as a PDF file. If you cannot find the course Grade.ly page, then you may need a course entry code (provided on Courses under Resources).

Assignments and Examinations:

- **Quizzes** will be distributed electronically on Grade.ly every Friday, with the exception of examination weeks. Each quiz will be made available beginning at 12AM (PST) until 11:59PM (PST) the same day. Each quiz will be worth 5 points and will have unlimited time to complete it. Students may use the textbook, class notes, and a graphing calculator on all quizzes, but peer collaboration and the use of unapproved sources (e.g., the internet, cell phone) of any kind are not allowed.
- **Homework** will be distributed electronically on Grade.ly, based on the problems from the textbook. Students are responsible for completing the online assignments on Grade.ly by 11:59PM (PST) on the indicated due date (unless otherwise stated). Work for each problem can be saved online, and the assignment may be submitted an unlimited number of times before the deadline.
 - For a subset of problems (short answer, multiple choice, and select all), you do not need to write up or explain your work. These problems are labelled with [Input], [Multiple Choice], and [Select All] and will be graded on correctness. Grade.ly may be sensitive to [Input] questions requiring short answers; for example, if you find your solution results in an integer, such as 2, enter 2 instead of 2.0.
 - * Some [Input] questions require a free-response, rather than a short answer. For these problems, you will be asked to explain your work. These problems will be graded on both completeness and correctness.
 - For others, you need to write your solution on a page by itself, and upload it as a separate PDF file to Grade.ly (either typed or scanned from handwritten work). *Improperly submitted homework (such as submitting the wrong file type) might not receive credit, as it is time-consuming to remedy.* You should write your solutions to these problems neatly and carefully, and provide full justification for your answers. No credit will be given if the solution is not justified, if the work is illegible, or if the submitted file is corrupted (e.g., cannot be viewed on Grade.ly). These problems are labeled with [Upload] and will be graded on both completeness and correctness.

You are strongly encouraged to work with other students in doing the homework, but the homework turned in must be your own and represent your own thinking and your own work. Turning in the work of others (including that provided by generative AI tools), allowing others to copy your work, or copying from a solutions manual or other source is a violation of Seaver College' Code of Ethics (see your student handbook for more information). This can lead to a lowering of your course grade as well

as counting as one of two ethics violations allowed at Seaver College. On each assignment, you will be asked to provide your collaborators.

Please be aware that checking unsanctioned online sources for solutions is not allowed and may be reported as cheating. In addition, the use of generative AI tools is strictly prohibited; the use of such source will result in an automatic zero on the assignment/assessment and will be reported as cheating.

- **Midterms** will be taken during the class period. Please refer to the calendar for the dates of these four exams. Each exam will be written to be completed within 45 minutes. See the cover page on each exam for specific instructions about the use of notes and technology.
- The **Final Exam** will take place on Wednesday, December 11, 2024, at 1:30PM – 4:00PM in our regular classroom. The grading policy for the midterm exams will be observed for the final exam. Please visit [Final Exams and Schedule of Classes](#) for more information.
 - All students enrolled in the course must take the final exam at the scheduled time. Exceptions are only granted if a student has two exams scheduled at the same time, or three exams scheduled on the same day. Students in these situations are expected to notify the instructor at least three weeks in advance.
- **Participation** is a vital component of class success. Students are expected to keep up with class, engage and participate both in large class discussions and group work, and in general contribute to a sense of classroom community. The participation grade is meant to encourage and reward class-wide (rather than individual) efforts to create a sense of classroom community so that this course can be effective, regardless of course modality. If each of you do all you can every day to participate as you are able, this can be a great course with everyone receiving 100% for participation. However, if you personally stop regularly attending and participating in class (without excused reasons) or if too few students participate for the course to run smoothly and effectively, the instructor reserves the right to implement individual or group participation requirements.

Important Dates:

Last day of Add/Drop period	August 23, 2024
Withdraw period begins	August 24, 2024
Last day to change Cr/NC status	September 5, 2024
Midterm #1	September 16, 2024 (<i>tentative</i>)
Last day to withdraw (with W)	October 17, 2024
Midterm #2	October 25, 2024 (<i>tentative</i>)
Midterm #3	November 22, 2024 (<i>tentative</i>)
Last day to withdraw (with WP/WF)	November 22, 2024 (by 5PM)
Last day to submit Change of Final Exam form	November 22, 2024
Final Exam	December 11, 2024

Make-Up Exams and Homework Extensions: In general, there will be no make-up exams. However, in unusual circumstances beyond your control, a make-up exam may be given on a case-by-case basis. This may require providing a detailed account of the situation and, if applicable, supporting documents. Approval in these cases is at the sole discretion of the instructor and/or the Divisional Dean.

Homework assignments not turned in by the due date will receive an automatic zero. Extensions may be granted on a case by case basis (a valid reason must be given). All requests must be made at least 48 hours in advance of the due date(s); requests made within 48 hours of the due date(s) will not be granted.

Dispute of Grade Policy: Any questions regarding the grading of any assignment, quiz or exam need to be cleared up within one week after the graded item has been returned.

Grading Scale and Policies: Your work in this course will be weighted as follows:

- Participation (2%)
- Quizzes (3%)
- Homework (10%)
- Midterm Exams (60%; 20% each)
- Final Exam (25%)

The weighted percentages below correspond to your final letter grade:

A: 93 – 100%	B+: 87 – 89%	C+: 77 – 79%	D+: 67 – 69%	F: 0 – 59%
A–: 90 – 92%	B: 83 – 86%	C: 73 – 76%	D: 63 – 66%	
	B–: 80 – 82%	C–: 70 – 72%	D–: 60 – 62%	

Note: No extra credit or bonus points are offered in this course.

Assistance: I will be available in my office for questions during the posted Office Hours or whenever the door is open. If you need to reach me outside of those hours, please email me to make an appointment. There will be peer tutoring available in the Student Success Center most evenings. See <https://seaver.pepperdine.edu/academics/academic-support/student-success-center/departamental-tutoring.htm> for details.

Class Expectations: It is my goal to teach you all the material necessary to be successful in this course. In return, I expect that you will show up to class on time and ready to work. We will use calculators for mathematical applications, but I expect that you will refrain from the use of cell phones, tablets or laptops unless instructed otherwise.

In order to make the class more interesting, I will alternate between lectures and group activities. We can only cover all of the material successfully in this way if you make an effort to stay on task. Working in groups is an excellent opportunity to learn from each other. You will know that you have mastered a subject when you can successfully teach that topic to a fellow student.

It is my expectation that you will spend at least two hours outside of class for every hour you spend in class studying and working on homework. If you put in eight hours a week, then you should be able to complete your assignments and study for your exams. If you do this for each class, then a 16 – 18 unit load will give you a 48 – 54 hour work week, which is not unreasonable in many professions.

As students at Pepperdine University, you are expected to approach this class with a Christian attitude. You should be willing to help your fellow classmates understand the material while working in groups or outside of class. Our classroom is a place to ask questions without feeling ashamed or looking foolish. Since your peers are entering this course with a broad spectrum of mathematical backgrounds, you should be patient with others asking questions and encourage one another in love.

As a professor at Pepperdine University, I will approach this class with a Christian attitude, viewing my role as that of a servant, being concerned first for your personal, especially intellectual, development. One of my goals is to build a community that is understanding and encourages one another. I commit to reporting grades that accurately and honestly reflect the level of work done in the class, as described in the paragraphs above.

Student Accessibility: Pepperdine University provides services and accommodations in accordance with the ADA and section 504 of the Rehabilitation Act. Pepperdine recognizes that each student is a unique individual and that the effect of a particular disability can vary from student to student. As a result, accommodations are determined through an interactive process with the student, the Office of Student Accessibility, and medical/mental health professionals.

Any student with a documented disability (chronic medical, physical, learning, psychological, or temporary) needing academic accommodations should contact the Office of Student Accessibility (Student Assistance

Center, SAC #105, Phone: (310) 506 – 6500, Email: student.accessibility@pepperdine.edu) as early in the semester as possible. All discussions will remain confidential. For additional information, please visit <http://www.pepperdine.edu/student-accessibility/>.

Ethics: Academic Integrity is the expression of intellectual virtue in human beings as a result of their creation in God’s image. It represents the convergence of the best of the human spirit and God’s spirit, which requires personal, private and community virtue. As a Christian institution, Pepperdine University arms that integrity begins in our very created being and is lived out in our academic work. In order for the code to be effective, the community must maintain its health and vitality. This requires a genuine sense of maturity, responsibility, and sensitivity on the part of every member. Each member of the Seaver College community is expected to pursue their academic work with honesty and integrity.

Academic integrity is violated when one of the following events occurs:

- Plagiarism
- Cheating
- Fabrication, or
- Facilitating Academic Dishonesty

For a more detailed description of these violations, see <http://seaver.pepperdine.edu/academicintegrity/policies/violations.htm>. All violations will be reported and handled according to the Academic Integrity Committee Procedures. In particular, any instance of cheating or plagiarism on an assignment or exam will be reported and result in no credit. As a reminder, the use of generative AI, AI writing, or similar AI tools or services is not permitted in any aspect of this class; the use of such tools will be considered a violation of academic integrity and be reported accordingly.

Course Evaluations: Online course evaluations are conducted for all Seaver College courses and are part of Pepperdine University’s commitment to excellence in teaching and learning. The evaluations provide useful feedback that faculty and schools use to improve the quality of instruction. Each instructor receives a compilation of the anonymous responses and comments to use in evaluating their own teaching and planning future courses. Faculty do not have access to course evaluation data until all course grades are posted. The course evaluation period opens at 7AM on Monday, November 18 and closes before final exams begin (3AM on Monday, December 9). To access the online course evaluation system, you may log on directly at <https://courseeval.pepperdine.edu/>.

Consent to be Recorded: Class sessions may be recorded by the professor using the Zoom recording feature for instructional purposes. Participation in the class during live sessions implies consent to the recording of those sessions. If a student does not wish to be recorded, they must notify the instructor to see if arrangements can be made. If this is not possible for educational reasons, the student may need to enroll in a different course.

Student and Faculty Privacy: In order to safeguard the privacy of all our students and faculty in online learning environments, no individual may record, reproduce, screenshot, photograph or distribute any video, audio, or visual content from an online course. This restriction applies to, but is not limited to, live sessions, recorded lectures, live discussions, and discussion boards. The only exceptions to this policy are the instructional recordings referenced above and one screenshot per meeting/ discussion that faculty may take as a form of attendance. These screenshots may not be shared or used for any other purpose. Any violation of this policy may subject the individual to disciplinary and/or legal action.

Intellectual Property: Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor, are the property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. Unless explicit permission is obtained from the instructor, recordings of lectures and review sessions may not be modified and must not be transferred or transmitted to any other person. Electronic devices other than laptops (e.g., cell phones, recording devices) are not to be used during lectures or exams without prior permission of the instructor.

All class lectures and materials herein, including but not limited to, pre-recorded and live lectures, live

discussions and discussion boards (and recordings thereof), posted course materials, visual materials that accompany lectures/discussions, and virtual whiteboard notes (collectively “Course Intellectual Property”) remain the intellectual property of the faculty member or other third-parties. No individual may record, reproduce, screenshot, photograph, or distribute any Course Intellectual Property in partial or full-format without the permission of the professor. Any violation of this policy may subject the individual to disciplinary and/or legal action.

Subject to Change Statement: Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.

Tentative Schedule:

MONDAY	TUESDAY	THURSDAY	FRIDAY
Aug 19th 1 Course & Grade.ly Overview	20th 2 Systems of Linear Equations (Section 1.1)	22nd 3 Row Reduction and Echelon Forms (Section 1.2)	23rd 4 Row Reduction and Echelon Forms (Section 1.2) Quiz #1 Due on GL <ul style="list-style-type: none"> • Get to Know You Qs at 11:59PM (PST)
26th 5 Vector Equations (Section 1.3) HW Due on GL <ul style="list-style-type: none"> • Section 1.1 • Section 1.2 at 11:59PM (PST)	27th 6 Vector Equations (Section 1.3)	29th 7 The Matrix Equation (Section 1.4) HW Due on GL <ul style="list-style-type: none"> • Section 1.3 at 11:59PM (PST)	30th 8 Solution Sets of Linear Systems (Section 1.5) Quiz #2 Due on GL <ul style="list-style-type: none"> • Section 1.1 • Section 1.2 at 11:59PM (PST)
Sep 2nd 9 NO CLASS <i>Labor Day</i>	3rd 10 Applications of Linear Systems (Section 1.6)	5th 11 Linear Independence (Section 1.7) HW Due on GL <ul style="list-style-type: none"> • Section 1.4 • Section 1.5 at 11:59PM (PST)	6th 12 Introduction to Linear Transformations (Section 1.8) Quiz #3 Due on GL <ul style="list-style-type: none"> • Section 1.3 at 11:59PM (PST)

MONDAY	TUESDAY	THURSDAY	FRIDAY
<p>9th 13</p> <p>The Matrix of a Linear Transformations (Section 1.9)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 1.7 • Section 1.8 <p>at 11:59PM (PST)</p>	<p>10th 14</p> <p>The Matrix of a Linear Transformations (Section 1.9)</p>	<p>12th 15</p> <p>Matrix Operations (Section 2.1)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 1.9 <p>at 11:59PM (PST)</p>	<p>13th 16</p> <p>Midterm #1 Review</p> <p>Quiz #4 Due on GL</p> <ul style="list-style-type: none"> • Section 1.4 • Section 1.5 • Section 1.7 • Section 1.8 <p>at 11:59PM (PST)</p>
<p>16th 17</p> <p>MIDTERM #1</p>	<p>17th 18</p> <p>The Inverse of a Matrix (Section 2.2)</p>	<p>19th 19</p> <p>Characterizations of Invertible Matrices (Section 2.3)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 2.1 • Section 2.2 <p>at 11:59PM (PST)</p>	<p>20th 20</p> <p>Matrix Factorizations (Section 2.5)</p>
<p>23rd 21</p> <p>Introduction to Determinants (Section 3.1)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 2.3 • Section 2.5 <p>at 11:59PM (PST)</p>	<p>24th 22</p> <p>Properties of Determinants (Section 3.2)</p>	<p>26th 23</p> <p>Area, Volume, and Linear Transformations (Section 3.3)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 3.1 • Section 3.2 <p>at 11:59PM (PST)</p>	<p>27th 24</p> <p>NO CLASS <i>Faculty Conference</i></p> <p>Quiz #5 Due on GL</p> <ul style="list-style-type: none"> • Section 1.9 • Sections 2.1 – 2.3 • Section 2.5 <p>at 11:59PM (PST)</p>
<p>30th 25</p> <p>Vector Spaces and Subspaces (Section 4.1)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 3.3 <p>at 11:59PM (PST)</p>	<p>Oct 1st 26</p> <p>Vector Spaces and Subspaces (Section 4.1)</p>	<p>3rd 27</p> <p>Null Spaces, Column Spaces, and Linear Transformations (Section 4.2)</p> <p>HW Due on GL</p> <ul style="list-style-type: none"> • Section 4.1 <p>at 11:59PM (PST)</p>	<p>4th 28</p> <p>Null Spaces, Column Spaces, and Linear Transformations (Section 4.2)</p> <p>Quiz #6 Due on GL</p> <ul style="list-style-type: none"> • Sections 3.1 – 3.3 <p>at 11:59PM (PST)</p>

MONDAY	TUESDAY	THURSDAY	FRIDAY
7th 29 Linearly Independent Sets and Bases (Section 4.3) HW Due on GL <ul style="list-style-type: none">• Section 4.2 at 11:59PM (PST)	8th 30 Linearly Independent Sets and Bases (Section 4.3)	10th 31 Coordinate Systems (Section 4.4) HW Due on GL <ul style="list-style-type: none">• Section 4.3 at 11:59PM (PST)	11th 32 NO CLASS <i>Fall Break</i>
14th 33 NO CLASS <i>Fall Break</i>	15th 34 Coordinate Systems (Section 4.4)	17th 35 The Dimension of a Vector Space (Section 4.5) HW Due on GL <ul style="list-style-type: none">• Section 4.4 at 11:59PM (PST)	18th 36 Rank (Section 4.6*) Quiz #7 Due on GL <ul style="list-style-type: none">• Sections 4.1 – 4.3 at 11:59PM (PST)
21st 37 Rank (Section 4.6*) HW Due on GL <ul style="list-style-type: none">• Section 4.5 at 11:59PM (PST)	22nd 38 Applications to Markov Chains (Section 4.9*)	24th 39 Midterm #2 Review	25th 40 MIDTERM #2
28th 41 Eigenvectors and Eigenvalues (Section 5.1) HW Due on GL <ul style="list-style-type: none">• Section 4.6• Section 4.9 at 11:59PM (PST)	29th 42 Eigenvectors and Eigenvalues (Section 5.1)	31st 43 The Characteristic Equation (Section 5.2) HW Due on GL <ul style="list-style-type: none">• Section 5.1 at 11:59PM (PST)	<div style="border: 1px solid black; display: inline-block; padding: 2px;">Nov 1st</div> 44 The Characteristic Equation (Section 5.2) Quiz #8 Due on GL <ul style="list-style-type: none">• Sections 4.4 – 4.6• Section 4.9 at 11:59PM (PST)
4th 45 Diagonalization (Section 5.3) HW Due on GL <ul style="list-style-type: none">• Section 5.2 at 11:59PM (PST)	5th 46 Complex Eigenvalues (Section 5.5)	7th 47 Inner Product, Length, and Orthogonality (Section 6.1) HW Due on GL <ul style="list-style-type: none">• Section 5.3 at 11:59PM (PST)	8th 48 Orthogonal Sets (Section 6.2) Quiz #9 Due on GL <ul style="list-style-type: none">• Section 5.1• Section 5.2 at 11:59PM (PST)

MONDAY	TUESDAY	THURSDAY	FRIDAY
11th 49 Orthogonal Sets (Section 6.2) HW Due on GL • Section 6.1 at 11:59PM (PST)	12th 50 Orthogonal Projections (Section 6.3)	14th 51 The Gram-Schmidt Process (Section 6.4) HW Due on GL • Section 6.2 • Section 6.3 at 11:59PM (PST)	15th 52 Least-Squares Problems (Section 6.5) Quiz #10 Due on GL • Section 5.3 • Section 6.1 at 11:59PM (PST)
18th 53 Applications to Linear Models (Section 6.6) HW Due on GL • Section 6.4 • Section 6.5 at 11:59PM (PST)	19th 54 Inner Product Spaces (Section 6.7)	21st 55 Midterm #3 Review	22nd 56 MIDTERM #3
25th 57 NO CLASS <i>Thanksgiving Break</i>	26th 58 NO CLASS <i>Thanksgiving Break</i>	28th 59 NO CLASS <i>Thanksgiving Break</i>	29th 60 NO CLASS <i>Thanksgiving Break</i>
<div style="border: 1px solid black; display: inline-block; padding: 2px;">Dec 2nd</div> 61 Diagonalization of Symmetric Matrices (Section 7.1) HW Due on GL • Section 6.6 • Section 6.7 at 11:59PM (PST)	3rd 62 The Singular Value Decomposition (Section 7.4)	5th 63 Final Exam Review HW Due on GL • Section 7.1 • Section 7.4 at *6PM* (PST)	6th 64 Final Exam Review Quiz #11 Due on GL • Sections 6.2 – 6.7 • Section 7.1 • Section 7.4 at 11:59PM (PST)

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<div style="border: 1px solid black; display: inline-block; padding: 2px;">Dec 9th</div> 1	10th 2	11th 3 FINAL EXAM 1:30PM – 4:00PM	12th 4	13th 5

Note: This calendar is tentative. For up-to-date information, see the course page on Courses.