Syllabus
Applied Matrix Theory

Math 551
MTWUF 1:50-2:50 p.m.
Instructor: Ray Treinen
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http://www.math.ksu.edu/~treinen

Section #10781
MTWU 131 CW, F 144 CW
Office: CW 125
Office Hours: MTWU 12:50-1:50, 2:50-3:50 M
(or by appt., or just stop by)

Text: Linear Algebra for Engineers and Scientists Using MATLAB, by K. Hardy, Pearson Prentice Hall.

Material: The material to be covered in this course is mostly contained in Chapters 1-7 of the textbook. The material includes systems of equations, matrices, vectors, orthogonality, determinants, eigenvalue problems. Some additional topics will also be included, particularly when it comes to current applications of matrix theory to engineering, image processing, and computer science.

Homework: Homework will be assigned weekly and will be due each Monday by 5pm. See the webpage for updates. Hand in your homework to the box near CW120. If you have any questions about homework I encourage you to ask them in class or visit my office. Late work will not be accepted.

Matlab projects: There will be seven MATLAB projects which will be discussed in the computer lab on Fridays. The lab assignments are to be handed in to the box by CW120 by 5pm each Thursday. Late work will not be accepted.

In-class Exams: There will be two in-class exams given throughout the semester. The first will be on Monday June 29th, and the second will be on Monday July 20th.

Final Exam: There will be a final exam on Friday July 31st, during the regular class time.

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<th>Grade Distribution</th>
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<tr>
<td>Homework</td>
<td>20%</td>
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<tr>
<td>Matlab projects</td>
<td>25%</td>
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<tr>
<td>In-Class Exams</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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Grades will be calculated by the scale 100%-90% = A, 89%-80% = B, 79%-70% = C, 69%-60% = D, below 59% = F.
Missed Class Policy: You must bring official written documentation for an approved absence with you when requesting makeup tests or homework. You may call or email me to give notice, written documentation must be delivered in person. Advanced notice is preferable, but for emergencies give prompt notice upon return.

Disabilities: Any student with a disability who needs an accommodation or other assistance in this course should make an appointment to speak with me as soon as possible.

Regarding Academic Honesty: Kansas State University has an Honor System based on personal integrity, which is presumed to be sufficient assurance in academic matters one’s work is performed honestly and without unauthorized assistance. Undergraduate and graduate students, by registration, acknowledge the jurisdiction of the Honor System. The policies and procedures of the Honor System apply to all full and part-time students enrolled in undergraduate and graduate courses on-campus, off-campus, and via distance learning. The honor system website can be reach via the following URL: www.ksu.edu/honor.

A component vital to the Honor System is the inclusion of the Honor Pledge which applies to all assignments, examinations, or other course work undertaken by students. The Honor Pledge is implied, whether or not it is stated: “On my honor, as a student, I have neither given nor received unauthorized aid on this academic work.” A grade of XF can result from a breach of academic honesty. The F indicates failure in the course; the X indicates the reason is an Honor Pledge violation.

Classroom conduct: All student activities in the University, including this course, are governed by the Student Judicial Conduct Code as outlined in the Student Government Association By Laws, Article VI, Section 3, number 2*. Students that engage in behavior that disrupts the learning environment may be asked to leave the class. Absolutely no cell phones are to be used in class. Using a cell phone during a test will be considered academic dishonesty.

*Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other University activities, including its public-service functions on or off campus, or other authorized non-University activities.

Changes: The instructor reserves the right to modify the contents in this description. Such changes will be announced in class; and it is your responsibility to follow such changes.