MANE 3351

LECTURE 25

Classroom Management

Agenda

- Final Review
- Return Raspberry Pis and Arduinos (bring to class or take to my office)
- No class next week - I will be in my office during class times

I will be on an ABET visit from December 13-17. Dr. Butler will proctor the final exam

RESOURCES

Handouts

- Lecture 25 slides
- Lecture 25 slides marked

Calendar

Week	Monday Lecture	Wednesday Lecture
14	**12/1:** Lecture 24 - Software	**12/3:** Lecture 25 - Review
15	**12/8:** Lecture 26 - no class	**12/10:** Lecture 27 - no class

Final Exam is Monday 12/15/2025 8:00 - 9:45 AM

I will be off-campus on an ABET visit and a proctor will be arranged for the final exam.

Final Exam Details

- Monday December 15, 2025, 8:00 - 9:45 AM
- Covers material since last test (linear algebra)
  - Part 3 (Days 17 - 25, Homeworks 6 and 7)
- One four inch by six inch notecard allowed
- Scratch paper will be provided
- Calculator needed
- An old final exam is not provided
- Final Exams are not returned
  - You are welcome to schedule an appointment to review your final exam with Dr. Timmer

Final Exam Topics

- Vectors
  - Addition, subtraction, scalar multiplication
- Matrix/Matrices
  - Addition, subtraction, scalar multiplication, multiplication of matrices, transpose of matrix, determinant of matrix (2×2 and 3×3), inverse of matrix
  - Properties of inverse matrix
- Solving Systems of linear equations
  - $A^{-1}b$
  - Row echelon form
  - Gauss Jordan Elimination with partial pivoting (Reduced Row Echelon Form)
- Finding Inverse of Matrix
  - 2×2 algorithm
  - 3×3 method of minors
  - Gauss Jordan Elimination with partial pivoting

Sq uare matrix

$AX = b$ → 1's on main diagonal, 0's below

$[A \mid I] \rightarrow [I \mid A^{-1}]$

Grading

- I’m trying to catch up! Keep checking Brightspace
- I’ll enforce the syllabus rules on late work
- Stay connected and if you have questions, send me an email

Solutions

- Solutions for Homework 6 and 7 will be posted on Thursday December 4, 2025
- You can use Octave or linalg to find solutions to all the homework 6 and 7 problems

Grades

- Please login to Brightspace and check your grades often
- If you have any questions, please contact me
- Grades are due Monday, December 22, 2025 at 3:00 pm
- Grades will be posted as soon as they become available (including course grade)

Late Work

- Syllabus
  - 10% penalty per day for work submitted after the deadline,
  - After one week, no credit will be given for late work
  - No late work will be accepted after study day
  - Certain assignments where late work will not be accepted will be announced

Turning In Equipment

- Please return the Raspberry Pi's and Arduinos as soon as possible
- Let me know if there will be any problems returning equipment before grades are due

Final Comments

- You should be able to perform any analysis that I did in class or that was in the last two homework assignments
- The final exam covers linear algebra and the last two homework assignments
- You have been a good class, study hard and perform well!