MEEN 2240 – Programming for Mechanical Engineers
Spring 2020

Course Description: This course is designed to introduce engineering students to problem solving, algorithm development and programming in MATLAB. Examples of applications in mechanical engineering will be given. This is an interactive course that is taught in a computer classroom. 3 hours per week (combined lecture and interactive sessions)

Prerequisite(s): MEEN 1000, MATH 2700 (corequisite)

Class Schedule: Section 001: M & W 2:00 pm to 3:20 pm, Classroom: F175
Section 002: T & TH 2:30 pm to 3:50 pm, Classroom: D215


Required Tools: Laptop or computer with MATLAB (2019a/b or later) including Symbolic Math Toolbox

Course Objectives: 1. Create and manipulate vectors and matrices in MATLAB.
2. Create and utilize MATLAB scripts.
3. Understand and utilize logical statements and looping techniques.
4. Create and use data structures and file I/O functions.
5. Utilize plotting techniques to create useful plots.

ABET Criteria: MEEN 2240 addresses the following ABET program outcomes:
An ability to identify, formulate and solve complex engineering problems by applying principles of engineering, science, and mathematics.

Instructor: Alex Hakimi
Email: alex.hakimi@unt.edu | Phone: 940-565-2400
Office & Hours: F102G, T & TH 4:00 pm to 5:00 pm

Canvas: All lecture notes and assignments will be posted in Canvas. You are responsible for checking Canvas on a routine basis. Announcements will be frequently posted in Canvas regarding homework assignments, quizzes, exams, etc. Additionally, your grades will also be posted in Canvas. If there is a discrepancy between the grade posted and the grade earned, let the TA know as soon as possible.

Lectures: Lecture notes are provided on Canvas. You are expected to attend every lecture to obtain interactive lecture notes.
Homework: Homework will be assigned on a weekly basis and consist of the following:

1. A set of practice problems corresponding to the lecture notes and textbook material. These problems will not be collected or graded, however, there will be quiz based on the material.

2. A set of assigned problems or a mini-project to be submitted via Canvas. This part of the assignment will be graded. You are responsible for checking the due date of each assignment and submitting it before the deadline.

Important: Late homework will not be accepted. No make-up assignments will be given. Homework emailed to the instructor or TA will not be accepted. There are absolutely no exceptions to any of these policies.

To succeed in this course, students should complete each assignment independently and have a strong understanding of the material presented in lecture. See the “Solutions Manual” and “Academic Dishonesty” sections below.

Quizzes: A pop quiz will occasionally be given during class time. Each quiz will consist of one or two problems similar to the assigned problems or an example presented during lecture. There are no make-ups for in-class quizzes. See “Academic Dishonesty” section below.

Exams: On exam days, seating will be randomly assigned by the instructor. All bags and smart devices must be placed at the front of the room (only a pen/pencil is permitted at the desk). Make-up exams will be permitted only for situations approved by the Dean of Students. See “Academic Dishonesty” section below.

Grade Evaluation: A: 90-100%  B: 80-89%  C: 70-79%  D: 60-69%  F: < 60%

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<tr>
<td>Homework</td>
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Re-Grades: Any requests for exam, quiz, or assignment re-grades must be made the day it is returned. Once class is over, re-grade requests will not be accepted. It should be noted that the entire exam, quiz, or assignment will be re-graded. This may result in a score lower than previously assigned.

Academic Dishonesty: Students are expected to do their own work on assignments. If it is determined that students are copying each other’s work or copying from the solutions manual, a score of zero will be given for that assignment. All assignments will be submitted to Turnitin to check for copying.

If it is determined that a student is talking during an exam, copying off of other students’ papers, sharing an equation sheet, etc., a score of zero will be given for that exam. Use of smart devices (phones, watches, tablets, laptops, headphones, etc) and calculators is strictly prohibited during exams. If a student is caught using any of these devices during an exam, a score of zero will be given for that exam.

Students are not allowed to browse the internet during exams. The only website that can be accessed during the exam is Canvas. If a student is found to be looking at other documents/websites, a score of zero will be given for that exam.

If a student is suspected of violating any of the policies above, they will be reported to the Academic Integrity Office. Two violations will result in an automatic F for the course. There are no exceptions to any of the policies in this section.
Solutions Manual: It is common knowledge that solutions manuals to all widely-used textbooks are available online. Please use these resources in the correct way. Going directly to the solutions manual is not beneficial to you, in fact, it is detrimental to your grade.

To use these resources properly, you should: 1. Attempt the problem on your own. 2. Continue working on the problem if you get stuck. Utilize the textbook, lecture notes, or online material to obtain a solution. 3. Compare your solution with the solutions manual. If mistakes have been made, make sure you understand why and learn how to fix them. Copying directly from the solutions manual is cheating (see Academic Dishonesty section above).

Your goal in doing the practice problems is learning how to apply the material learned in class to a variety of problems. The only way to do this is to work through problems on your own.

Disability Policy: All reasonable accommodations will be made to facilitate special needs. If special accommodations are required, the student must first meet with the staff of the Office of Disability Accommodation (ODA), (940) 565-4323. After meeting with that office, please contact me to discuss what accommodations will be necessary.

For more information, see http://www.unt.edu/oda