

UNIVERSITY OF NORTH TEXAS
MEEN 3230 System Dynamics and Controls
Fall 2026. 3 Credit hours

Instructor: Dr. Mark Wasikowski

Office Hours: DP F101L; Office Hours: zoom, by appointment

Email Address: mark.wasikowski@unt.edu (DO NOT use CANVAS email)

Lecture: Tu Th 1:50 - 3.10 pm, NTDP F183, in-person format only

MEEN 3230 Course Description: Review of basic modeling techniques of the dynamic behavior of mechanical and electrical systems. Linear dynamics. Block diagrams. Feedback and compensation. Computer simulations of steady-state and dynamic behavior. Root locus and frequency response methods. Vibration analysis, control and suppression.

Prerequisites: NOT be pre-engineering major. Pass with C or better:

1. MATH 3410 Differential Equations
2. MATH 2700 Linear Algebra and Vector Geometry
3. ENGR (MEEN) 2302 Dynamics

Required Text: System Dynamics and Controls, Kelly, 1st Ed., Cengage.

Required Software: MATLAB (<https://aits.unt.edu/software/matlab.html>) through UNT.

GRADING RUBRIC: standard 90/80/70/60 scale. No curve. Perceived effort is not considered.

Assessment Items	% Of Final Grade
<i>Homework</i>	<i>15%</i>
<i>Quizzes (10 @ 4%)</i>	<i>40%</i>
<i>Midterm</i>	<i>20%</i>
<i>Final Exam – per Registrar</i>	<i>25%</i>
Total	100%

1. Student's responsibility to attend class, check CANVAS announcements, assignments, etc. stay current.
2. Participation evaluated in class. Must be present for credit. NO credit for arriving late.
3. Participation graded. Attending class, but not participating, is a 0-participation score.
4. Participation includes pop quizzes, responding positively to questions, and in-class assignments.
5. All assignments posted on Canvas. Students are responsible for checking on a routine basis.
6. No late homework because solutions are immediately available after the due date / time.
7. Regrades requested < 1 week from returning assignment – otherwise grade is final.
8. No extra credit for individual students. Do not request, at semester end, extra credit to boost grade.
9. Cheating results in automatic failing course grade & reporting to UNT Office of Academic Honesty.
10. Absence accommodation must be documented according to university policy.
11. The course follows all UNT policies.
12. The instructor reserves the right to make administrative changes to the syllabus.