

UNIVERSITY OF NORTH TEXAS
MEEN 3230 System Dynamics and Controls
Summer 2025. 3 Credit hours

Instructor: Dr. Mark Wasikowski

Office Hours: DP F101L; Office Hours: MW noon - 1.50 pm. or zoom, by appointment

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

Lecture: MW 2-3.50 pm, NTDP 185, 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 Multivariable Calculus
3. ENGR 2302 Dynamics

Recommended Text: Palm; "System Dynamics", 4th, McGraw Hill, Connect 9781260443967.

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>Participation / Attendance</i>	15%
<i>Homework – weekly, due at class time on Monday's</i>	20%
<i>Quizzes – typically on Wednesday's, plus the last class week</i>	50%
<i>Final Exam – 25 July</i>	15%
Total	100%

1. Student's responsibility to attend class, check CANVAS announcements, assignments, etc. stay current.
2. Attendance called via roll in class. Must be present for credit. NO credit for arriving late.
3. Participation required / graded. Attending class, but not paying attention or participating, is a 0.
4. All assignments posted on Canvas. Students are responsible for checking on a routine basis.
5. No late homework because solutions are immediately available after the due date / time.
6. Regrades requested < 1 week from returning assignment – otherwise grade is final.
7. No extra credit for individual students. Do not request, at semester end, extra credit to boost grade.
8. Cheating results in automatic failing course grade & reporting to UNT Office of Academic Honesty
9. Any absence for which accommodation is requested must be documented.
10. The course follows all UNT policies. The instructor reserves the right change syllabus.