ME 3220 (Section 1)

Instructor: Prof. Chengyu Cao
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Time and Place: Tu/Th 8:00-9:15am at Bronwell 124

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Teaching Assistant: Zeping Xia, E-mail: zeping.xia@uconn.edu Office: EII 313 Hours: TBD

Pre-requisite: ME 3253; MATH 2110 and 2410; CE 2120.


Grading:  
10% Preliminary and Exit Quizzes
10% In-class Quiz
15% Mini-project
25% Mid-term
30% Final Exam
10% Homework

Syllabus

♦ Review of 2\textsuperscript{nd} order ODE 1.5 wk
♦ 1 DOF Oscillators: 4 wks
  a) Newton’s law and energy approach
  b) Transient response, resonance, step and impulse response

♦ Measurement of damping 1 wk
♦ 2 DOF Systems: 3 wks
♦ Applications: Transmissibility and passive absorbers 1 wk
♦ Estimation of Frequencies 2 wks
♦ Measurement of Frequencies 1.5 wk