

ME470 Vibrations

Winter 2009

Instructor: Per G. Reinhall
MEB 307, 543-5628

Office Hours: 3:30-4:30 M & F or when ever I'm alone in my office.

Text: Principles of Vibration
Benson H. Tongue, Oxford University

Website: <http://faculty.washington.edu/reinhall/>

Objective: This is an introductory course in vibration analysis. At the end of the quarter you should be familiar with linear vibration theory and capable of incorporating vibration analysis into the design process.

Week	Topic
1	Free Vibrations, 1 DOF – Ch 1
2	Forced Vibration, 1 DOF - Ch 2,
3	Nonsinusoidal Excitation, Transient Vibration – Ch 3
4	Multi Degree Systems - Ch 4
5	Multi Degree Systems - Ch 4 Test 1, Feb 2
6	Vibration of Continuous Systems - Ch 5
7	Vibration of Continuous Systems - Ch 5
8	Modal Analysis Test 2, Feb 25
9	Approximate Methods - Ch 6, 7
10	Signal Processing - Ch 8

Holidays: Mondays Jan 19 and Feb 16
Last day of instruction: Friday, March 13
Final Examination: Wednesday, March 17, 2:30-4:20 pm

Grading: 2 Midterms -20% each
Final - 40%
Homework - 20%