Old Dominion University - Department of Aerospace Engineering
AE 743/843 Experimental Modal Analysis - Fall 2001

Lecture 3 hrs; 3 credits; Prerequisites: AE 641

Instructor: Dr. Ralph Buehrle
Phone: (757) 864-7072
E-mail: r.d.buehrle@larc.nasa.gov

Text Book: Modal Testing: Theory, Practice and Application, 2^ Edition,
D. J. Ewins, Research Studies Press, 2000

Grading:
- Homework/Quiz 40%
- Experimental Project –Paper 40%
- Presentation 20%

Course Contents:

- 8/28, 9/4 Overview; Experimental Modal Analysis Theory
- 9/11 Digital Signal Processing for Modal Analysis
- 9/18, 9/25 Test Setup and Measurement Techniques
- 10/2, 10/9 Modal Parameter Estimation Techniques
- 10/16 Experimental System Models
- 10/23, 10/30 Applications -Correlation of Numerical Models; Structural Modification
- 1/6-11/27 Experimental Projects (Meet in Vibration Lab)
- 12/4 Presentations