AE 402 Aircraft Instruments and Measurement  
Fall 2011  
Monday, 14:40-17:30, AE-024

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Course Goals: 
At the end of this course you should be able to work with simple measurement devices frequently used in Aerospace Engineering, understand their working principles and limitations. The course will give an introduction on physical data and a brief introduction to signal processing. Also, you should understand the scope and extent of avionics in modern aerospace vehicles, and how they impact vehicle design and performance. Specific systems will be used as case-studies in lecture and in the project.

References:  
- E.H.J. Pallett, "Aircraft Instruments"  
- Instructors notes and handouts.

Course Topics:  
1. Introduction  
2. Description and Classification of Physical Data  
3. Description and Performance of Basic Measurement Devices  
4. Introduction to Data Filtering  
5. Basic Flight Instruments  
6. Air Data Systems  
7. Inertial Navigation  
8. Radio Navigation  
9. Avionics Interfaces

Grading: 2 Midterms, 1 Final, ~2 HW, 1 Project