

Class Presentations

DUE: All materials due by midnight on Wednesday, March 11.

Learning Objectives

- Gain in-depth knowledge of a sensor or transducer;
- Gain presentation practice;
- Defend your work in front of your peers.

Schedule and Assigned Topics

Date	Teams	Measurement Topic
Mon, 3/2	Naomi Allsman, Brianna Palacios, Bryan Wolf	Temperature – Thermocouples
	Kim Owen, Danny Rippe, Peter Thomsen	Temperature – RTD's
	Tyrell DeLeon, Andrew Wilbur	Temperature – Thermistors
Wed, 3/4	Parker Bailey, Jonathen Stacy, Geoffrey Urbin	Pressure
	Abby Covrig, Kyron Heinrich, Kristyna Hyblova	Piezo-Electric and Piezo-Resistive
	Jared Allain, Devin Crowley	Distance – LVDT's, etc.
Mon, 3/9	Gus Rocha, Ariana Salmon	Microelectromechanical Systems
	Aubrey Carambot, Spencer Glubay, Asher Trunkey	Force and Torque
	Taiko Cantil, Nyat Nguyen, Johnny Vargas	Acoustical
Wed, 3/11	Edson Carbajal, Grant Hartman, Robert Ingram	Flow
	Kevin Corrigan, Ivan Snyder, Eric Welch	Ultrasonic
	Sydney Peck, David Rodman, Donnieval Walker	Hall Effect and Magnetic Sensors

Specifics

- Your task is to take your assigned topic and do some research. You can track down information on the web, from manufacturers, from books and journals, and perhaps technical papers from conferences. I'd like to leave what you present and write about quite open-ended, ensuring that an overview of your topic is important as well as an in-depth analysis.

Deliverables

- 10-minute class presentation;
- 5-6 page paper on your assigned topic;
- Test questions;
- Attendance.

Presentations

- Expect your presentation to be about 10 minutes in length followed by a 3-minute question and answer session. You should give an overview, an in-depth analysis, and be sure to include applications of your assigned measurement device. Presentation partners and topics may be switched with approval by the instructor.

Paper

- A high-quality paper on your assigned topic. It must include an overview, in-depth discussion, applications, and references.

Test Questions

- One page of test questions, with answers, in Word format that includes:
 - 1 multiple choice problem;
 - 2 true / false problems;
 - 1 short answer question.

Attendance

- Attendance is required for all students for all presentations.

Deliverables and Grading

- This homework will constitute 40% of your final homework grade. Note that **each person** must submit all materials to the required drop boxes. This homework grade will be composed of the following parts:
 - Your oral PowerPoint presentation (20 points) placed in the *hw7pres* dropbox (5 points).
 - Your written paper (30 points) placed in the *hw7paper* dropbox (5 points).
 - Test questions with answers (in Word format) placed in the *hw7test* dropbox (10 points).
 - Attendance at all 4 class periods (20 points).
 - Quality of work factor, as judged by the instructor (10 points).