Date | Topic | Reading | HW Due
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LAB: No Lab This Week

M | Jan 7 | Course Introduction; Circuits Review | Notes
W | 9 | AC Signals; Measurement Characteristics | Notes

LAB1: Waveform Measurement and Instrument Loading (2:30)

M | 14 | Measurement Characteristics (10:45) | Notes | HW #1
W | 16 | Number Systems; Data Acquisition (10:45) | Ch 1.4, 7, Notes

LAB2: Calibration
Tu | 22 | Data Acquisition; Digital Sampling | Ch 7.2-7 | HW #2
W | 23 | Data Integrity; Fourier Series | 7.8, 2.4, Notes

LAB3: Data Acquisition

M | 28 | Fourier Series and the Fourier Transform | Ch 2.4-5 | HW #3
W | 30 | Fast Fourier Transform and Matlab | Ch 2.4-5

LAB4: Signal Processing Using Fourier Transforms

M | Feb 4 | Digital and Analog Filtering | 6.8 | HW #4
W | 6 | Field Trip | HW #5

LAB5: Mobile Sensor Analysis

M | 11 | Sensor Overview; Test Review | Notes | HW #6
W | 13 | **Midterm Exam**

No Lab This Week

M | 18 | **No Class – Snow Frolic**
W | 20 | Acceleration and Accelerometers | Ch 12

LAB6: Accelerometers and Vibration Analysis

M | 25 | Student Presentations | HW #7
W | 27 | Student Presentations

LAB7: Strain Gauge Applications

M | Mar 4 | Measuring Strain
W | 6 | Student Presentations

LAB8: Strain Gauge Applications

M | 11 | Student Presentations | Notes
W | 13 | Course Evaluation; Final Exam Review

W | 20 | **Comprehensive Final Exam (Noon – 2pm)**