

AME 20213 – Fundamentals of Measurement and Data Analysis – Spring 2008

<u>PERIOD</u>	<u>DATE</u>	<u>TOPIC</u>	<u>READING</u>
1	1/15	Orientation; Role of Experiments	1.1-1.6
2	1/17	Experiment/Theory Comparison Considerations	7.5, 9.1-9.6
3	1/22	Determining the Appropriate Fit	10.9
4	1/24	Quantifying Experimental Uncertainty	9.7-9.10
5	1/29	Quantifying Experimental Uncertainty (cont'd)	--
6	1/31	Technical Memo/Report Writing	3.1-3.5
7	2/5	Basic Electronics	4.1-4.5
8	2/7	DC Circuit Analysis; Wheatstone Bridge	4.6
9	2/12	Measurement Systems and Sensors	6.1-6.4
10	2/14	Amplifiers and Filters	6.5-6.7
11	2/19	A/D Conversion	6.8
12	2/21	Calibration and Static Response	5.1-5.3
13	2/26	MID-TERM EXAM	--
14	2/28	Dynamic Response	5.4-5.5
----- BREAK WEEK -----			
15	3/11	First-Order System Response	5.6
16	3/13	Second-Order System Response	5.7
17	3/18	Higher-Order System Response	5.8
18	3/20	Linear Regression Analysis	10.1-10.5
19	3/25	Signal Characterization	11.1-11.4
20	3/27	Signal Parameters	11.6
21	4/1	Digital Sampling	12.1-12.3
22	4/3	Signal Aliasing	12.6
23	4/8	Probability Concepts and Their Graphical Display	7.6-7.9
24	4/10	Probability Density Functions	8.1-8.3
25	4/15	Normal Distribution	8.3-8.4
26	4/17	Student's t-Distribution; The SDOM	8.5-8.6
27	4/22	Chi-Square Distribution	8.9
28	4/24	Chi-Square Distribution (cont'd)	--
29	4/29	Course Review	
	5/7	FINAL EXAM (Wednesday: 10:30 AM to 12:30 PM)	