

Syllabus	Phys 238		Spring 2025	
Jan.	27	Introduction & Overview	Taylor Chs. 1–2	
	29	The Simple Pendulum		
	31	Writing reports in L ^A T _E X; Introduction to Uncertainty	Taylor Ch. 3	
Feb.	3	Statistical Analysis	Taylor Ch. 4	
	5	Normal Distribution	Taylor Ch. 5	
	7	Pendulum Report Due; Least Squares; Mathematical Tools	Taylor Ch. 5	
	10	Torsional Pendulum (Part 1)		
	12	Torsional Pendulum <i>continued</i>		
	14	HW #1; Linear fits	Taylor Ch. 8	
	17	Nonlinear fits	Taylor Ch. 8	
	19	Torsional Pendulum <i>continued</i>		
	21	Torsional (1) Report Due; Damped Oscillations		
	24	Torsional Pendulum (Part 2)		
	26	HW #2; Torsional Pendulum (2) <i>continued</i>		
	28	Numerical Modeling; Air drag		
	Mar.	3	<i>continued</i>	
		5	Torsional (2) Report Due; Numerical Modeling <i>continued</i>	
7		Resonance—Theory		
10		Mechanical Resonance		
12		<i>continued</i>		
14		HW #3; Resonance <i>continued</i>		
17–21		<i>Spring Break</i>		
24		<i>continued</i>		
26		Complex Impedance		
28		Resonance Report Due; RLC Circuits—Theory		
Apr.	31	RLC Damped Oscillations—Experiment		
	2	RLC <i>continued</i>		
	4	<i>continued</i>		
	7	RLC Report Due; RLC Resonance—Theory		
	9	HW #4; RLC Resonance Experiment		
	11	<i>continued</i>		
	14	<i>continued</i>		
	16	Fourier Analysis		
	18	RLC Resonance Report due; Fourier Analysis <i>continued</i>		
	21	Fourier Analysis <i>continued</i>		
	23	HW #5; Oral Reports		
	25	Oral Reports		
	28	AC Filters		
	30	Oral Reports		
May	2	Oral Reports		
	5	AC Filters Report Due; Superconductivity		
	7	Oral Reports		
	9	HW #6		
	14	Superconductivity Report Due		