

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