

Syllabus		Phys 131	Spring 2026
Jan.	26	Introduction; Units	Ch. 1:1–5
	28	Vectors	Ch. 1:7–9
	30	Position, Velocity, and Acceleration; HW #1	Ch. 2:1–3
Feb.	2	Motion with Constant Acceleration	Ch. 2:4
	4	Freefall; Integration; HW #2	Ch. 2:5–6
	6	Two and Three Dimensional Motion	Ch. 3:1–3
	9	Projectile Motion	Ch. 3:3
	11	Circular Motion; HW #3	Ch. 3:4
	13	Forces	Ch. 4:1–4
	16	Newton's Third Law; Free Body Diagrams	Ch. 4:5–6
	18	<i>Problems</i> ; HW #4	Ch. 1-4
	20	Hour Test I	Chs. 1–4
	23	Statics & Dynamics	Ch. 5:1–2
25	Friction	Ch. 5:3	
27	Circular Motion	Ch. 5:4	
Mar.	2	Work and Kinetic Energy	Ch. 6:1–3
	4	Work and Power; HW #5	Ch. 6:4
	6	Potential Energy	Ch. 7:1–2
	9	Conservative and Nonconservative Forces	Ch. 7:3–4
	11	Conservation of Energy; Energy Diagrams; HW #6	Ch. 7:5
	13	Linear Momentum	Ch. 8:1–2
	16–20	<i>Spring Break</i>	
	23	Conservation of Momentum and Collisions	Ch. 8:3–4
	25	Center of Mass; Two-Dimensional Collisions; HW #7	Ch. 8:5
	27	Rotational Kinematics	Ch. 9:1–3
30	Hour Test II	Chs. 5–8	
Apr.	1	Rotational Energy; Rotational Inertia	Ch. 9:4,6
	3	Torque & Vector Cross Product	Ch. 10:1–2
	6	Rotational Dynamics; Rolling Motion	Ch. 10:3–4
	8	Angular Momentum; HW #8	Ch. 10:5
	10	Conservation of Angular Momentum	Ch. 10:6
	13	Gravitational Force	Ch. 13:1–2
	15	Gravitational Potential Energy; HW #9	Ch. 13:3
	17	Orbits	Ch. 13:4-6
	20	Simple Harmonic Motion	Ch. 14:1–3
	22	Energy and Applications; Pendulum; HW #10	Ch. 14:4–5
24	Hour Test III	Chs. 8–10,13	
27	Damping	Ch. 14:6–7	
29	Wave Properties	Ch. 15:1–3	
May	1	Wave Speed; Standing Waves	Ch. 15:4,7–8
	4	Superposition & Interference	Ch. 15:6
	6	Beats & Doppler Effect; HW #11	Ch. 16:7–8
	8	<i>Review</i>	
<i>Final Exam (cumulative)</i>			

March 25, 2026