

## Tentative Syllabus for Physics 1112 — Spring 2017

Date	Day	Unit #	Unit Topic(s)	Lecture Topic(s)	Textbook Reading (Chapter: Sections)	Homework Due	Lab	P1112 Exams	
Jan. 25	W	1	Measurement & Vectors	Introduction	1: 1-6		No lab this week.		
	R							"	
	F				Vectors; Motion; Reference Frames	1: 7-10; 3: 1, 5		"	
Jan. 30	M	2	1-, 2-, & 3-D Motion	Velocity & Acceleration in 1-D	3: 2; 2: 1-6	1A	Lab Co-op #2: Relative Motion & Reference Frames		
	T								
	W				Projectiles	3: 3		"	
	R						1B	"	
	F				Circular & Curvilinear Motion	3: 1, 2, 4	"	"	
Feb. 6	M	3	Force	Interactions & Forces	4: 1-3, 5; 5: 5		No lab this week.		
	T							"	
	W				Newton's Laws & Gravity	4: 3-6; 13: 1-2		"	
	R						2	"	
	F	4	Applying Newton's Laws	Statics & Dynamics	5: 1-2	"	"		
Feb. 13	M				Dynamics & Statics	5: 1-2		Lab #4: Dynamics of 1-D Motion	
	T							"	
	W				Friction & Drag	5: 3		"	
	R						3	"	
	F		Dynamics of Circular Motion	5: 4; 13: 4	"	"			
Feb. 20	M			<b>FEBRUARY</b>			No lab this week.		
	T			<b>BREAK</b>			"		
	W	5	Energy	Work & Energy	6: 1-3		"		
	R						(4)	"	
	F				Potential Energy	7: 1	"	"	
Feb. 27	M			Conservation of Energy Applications	7: 2-3		No lab this week.		
	T						"	Prelim 1	
	W			Energy Graphs	7: 4-5		"		
	R						"		
	F			TBD			"		
Mar. 6	M			Force, Potential Energy, & Power	7: 4-5; 6: 4		Lab Co-op #5: Newton's Laws & Dynamics		
	T						"		
	W	6	Momentum	Momentum & Impulse	8: 1-2		"		
	R						5	"	
	F				Collisions	8: 3-4	"	"	
Mar. 13	M			Center of Mass	8: 5		Lab #6: Energy Exchanges		
	T						"		
	W			Recoil & Propulsion	8: 6		"		
	R					6	"		
	F	7	Rotational Motion	Rotational Kinematics	9: 1-3	"	"		
Mar. 20	M				Rotational Energy & Inertia	9: 4-6; 10: 3		Lab #7: "Bounce" Collisions	
	T							"	
	W				Torque & Rotational Dynamics	10: 1-4		"	
	R					(7)	"		
	F		Rotational Equilibrium	11: 1-3	"	"	"		

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Mar. 27	M			More Rotational Equilibrium	11: 1-3		No lab this week.	
	T						"	
	W	8	Angular Momentum	Angular Momentum	10: 5-6		"	
	R						"	Prelim 2
	F			TBD			"	
Apr. 3	M			<b>SPRING BREAK</b>			No lab this week. (Spring break.)	
	T						"	
	W						"	
	R						"	
	F						"	
Apr. 10	M			More Angular Momentum	10: 5-6		Lab Co-op #8: Rotational Equilibrium	
	T							
	W			Gyroscopes & Precession	10: 7		"	
	R					8	"	
	F	9	Oscillations	Simple Harmonic Motion (SHM) Kinematics & Energy	14: 1-3	"	"	
Apr. 17	M			SHM Dynamics & Applications	14: 4-6		Lab #9: Angular Momentum & Precession	
	T							
	W			Driven SHM & Resonance	14: 7-8		"	
	R					9	"	
	F	10	Thermal Physics	Temperature & Heat	17: 1-3, (4), 5-6	"	"	
Apr. 24	M			Heat Transfer Mechanisms	17: 7		Lab #10: Free & Driven Oscillations	
	T							
	W			Ideal Gas & Kinetic Theory	18: 1-4, (5)		"	
	R					10	"	
	F			Thermodynamic Processes	19: 1-3	"	"	
May 1	M			1 <sup>st</sup> Law of Thermodynamics	19: 4-8		Lab #11: Thermomechanics	
	T							
	W			Heat Engines & Refrigerators	20: 2-4		"	
	R					11	"	
	F			2 <sup>nd</sup> Law of Thermodynamics	20: 1, 5-6	"	"	
May 8	M			Entropy	20: 7-8		No lab this week.	
	T						"	
	W			More Entropy	20: 7-8	12	"	
	R			<b>STUDY PERIOD</b>				
	F			↓				
May 15	M			<b>CU FINAL EXAMS</b>				
	T			↓				
	W							Final
	R			↓				
	F			<b>STUDY DAY</b>				
May 20	Sa			<b>More CU FINAL EXAMS</b>				
	Su			↓				
May 22	M							
	T			↓				