

# PHYS 3344 Tentative Syllabus F19

[http://www.physics.smu.edu/coan/3344/3344\\_syl\\_fall19.html](http://www.physics.smu.edu/coan/3344/3344_syl_fall19.html)

**Location: 157 Fondren**

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<b>Date</b>	<b>Topic</b>	<b>Reading Due</b>	<b>HW Due</b>
22 Aug	Intro, Evaluation and Newton's Laws	T 1.1-1.7	
24 Aug	Projectile motion and air resistance	T 1.7, 2.1-2.4	
29 Aug	Linear Air Resistance	T 2.1-2.3	
1 Sep	HW due today		
5 Sep	Linear and Quadratic Air Resistance	T 2.4-2.5	
7 Sep	Quadratic Air resistance	T 2.4-2.5	
8 Sep	HW due today		
12 Sep	Cons. of Linear Momentum and COM	T 3.1-3.3	
14 Sep	Angular Momentum, Kepler's 2nd Law	T 3.4-3.5	
15 Sep	HW due today		
19 Sep	KE and Work I	T 4.1-4.5	
<b>21 Sep</b>	<b>Test</b>		
22 Sep	HW due today		
26 Sep	KE and Work II	T 4.1-4.4	
28 Sep	U(t), E of 1-D systems, Central forces	T 4.5-4.8	
29 Sep	No HW due today		
	Central Forces	T 4.9-4.10	
3 Oct	Central Forces II	T 4.10	
5 Oct	Simple/Damped Harmonic Oscillation	T 5.1-5.3	

6 Oct	No HW due today		
10 Oct	Fall Break. No class.		
11 Oct	HW due today		
12 Oct	Damped Oscillations II	T 5.4	
13 Oct	No HW due today		
17 Oct	Driven Damped Oscillations	T 5.5-5.6	
19 Oct	Calculus of Variations	T 6.1 - 6.4	
20 Oct	HW due today		
24 Oct	Calculus of Variations with Constraints	T 6.1-6.4, TEC notes	
26 Oct	Lagrangians	T 7.1-7.5	
27 Oct	HW due today		
<b>31 Oct</b>	<b>Test</b>		
2 Nov	Lagrangian Examples and Constraint Forces	T 7.6, 7.10	
3 Nov	HW due today		No HW due
7 Nov	Central Forces w/ 2 Bodies	T 8.1-8.4	
9 Nov	Orbits	T 8.5-8.8	
10 Nov			
14 Nov	Non-Inertial Reference Frames	T 9.1-9.5	
16 Nov	Non-IRM	T 9.6-9.10	
17 Nov			
<b>21 Nov</b>	<b>Test</b>	Chaps:???	
23 Nov	Thanksgiving		
27 Nov			
28 Nov	Rigid Body Rotational Motion	T 10.1-10.4	
30 Nov	RBRM II	T 10.5-10.8	
4 Dec	HW due today		

4 Dec Coupled Oscillators and Normal Modes T 11.1-11.3

**11 Dec Final** Cumulative