

PHYSICS SEMESTER PLAN: 1ST Semester

	week 1 Date / /	week 2 Date / /	week 3 Date / /	week 4 Date / /
Topics	<ul style="list-style-type: none"> kinematics in 1D speed reference frames 	<ul style="list-style-type: none"> coordinate systems velocity acceleration, falling bodies 	<ul style="list-style-type: none"> kinematics in 2D vectors vector addition multiplication of a vector by a scalar 	<ul style="list-style-type: none"> methods for adding vectors relative velocity projectile motion.
Standards	physics: 1a-f	physics: 1b,c,l; 2c	physics: 1j	physics: 1i, 1j
Lecture Notes	1.1.1 - 1.2.5	1.2.6 - 1.3.6	2.1.1 - 2.2.3	2.2.3 - 2.4.7
Readings	Chap. 1 Sections 1 - 7	Chapter 1 Sections 8-11	Chap. 2 Sections 1 - 5	Chapter 2 Sections 6-10
Homework	Chapter 1 #1,3,4,7,10,11,14	Chapter 1 #15 -17, 19-23	Chapter 2 #3,9,10,11,12	Chapter 2 #13-20, 24-34, 39
Labs & Projects		<ul style="list-style-type: none"> Lab Handout Reaction Time water bottle rocket project design specs 	<ul style="list-style-type: none"> Lab book 2.1 Kinematics 	<ul style="list-style-type: none"> Lab book 2.4 Projectiles water bottle rocket project contest
AV, Internet	Video of last years rocket contest (10min)	Nat. Geographic Special on Dr. Robert Goddard (10 min excerpt)	Physical Science laser disc: vectors (15 min)	www.nasa.gov
Demos	Demo Redstone compressed air rocket (day 1)	Acceleration (Cunningham & Herr 2.3)	Accelerometer (Cunningham & Herr 3.1)	
Special		Guest speaker: Dr. Tom Johnson, JPL rocket engineer		Remind students of JPL open house this Saturday
Tests		Ch. 1 quiz		Ch. 1-2 unit test
Points	Homework: 30	Quiz: 25 Homework: 30 Lab: 50	Homework: 30 Lab: 50	Test: 100 Homework: 30 Project: 50