Physics Scope and Sequence

(Number of days is approximate)

Tentative test dates	Days	Topic	Chapter	Possible activities and labs
8/12	4 days 6 days	Measurement, graphing and mathematical relationships **Unit 1 speed and velocity** SP1. (a-b) Obtain, evaluate, and communicate information about the relationship between distance, displacement, speed, velocity, and acceleration as functions of time.	1 & 2	Tower activity, Lifesaver lab, Measurement lab Physics 500, position v. time graphing
8/19	5 days	**Unit 2 Acceleration** SP1. (b-c) Obtain, evaluate, and communicate information about the relationship between distance, displacement, speed, velocity, and acceleration as functions of time.	2	Acceleration lab, dollar drop
8/29	6 Days	**Unit 3 vectors and projectiles** SP1. (c-d) Obtain, evaluate, and communicate information about the relationship between distance, displacement, speed, velocity, and acceleration as functions of time.	3	Hall vectors, bulls eye lab
9/8	5 days	**Unit 4 Newton's laws** SP2. (a-c) Obtain, evaluate, and communicate information about how forces affect the motion of objects.	4	Rubber band spring scale lab, Newton's 2nd law lab, free body diagrams
9/16	6 days	**Unit 5 applications of newton's laws** SP2. (d-e) Obtain, evaluate, and communicate information about how forces affect the motion of objects.	7	Under pressure lab, rough riders lab, circular motion lab,
9/23	5 days	**Unit 6 momentum** SP3. (d) Obtain, evaluate, and communicate information about the importance of conservation laws for mechanical energy and linear momentum in predicting the behavior of physical systems.	6	Bungee lab, Collison Phet computer lab
10/10	6 days	**Unit 7 mechanical energy** SP3. (a-c) Obtain, evaluate, and communicate information about the importance of conservation laws for mechanical energy and linear momentum in predicting the behavior of physical systems.	5	No free lunch Phet computer lab, people power lab
10/13	3 days	**Unit 8 electrostatics** SP5. (a-c) Obtain, evaluate, and communicate information about electrical and magnetic force interactions.	16	Static balloon lab, electroscope lab
10/24	7 days	**Unit 9 electric circuits** SP5 .(d) Obtain, evaluate, and communicate information about electrical and magnetic force interactions.	17&18	Phet electric circuit lab
11/2	7 days	**Unit 10 magnetism** SP5. (e) Obtain, evaluate, and communicate information about electrical and magnetic force interactions.	19	Magnetic field lines lab, Phet electromagnet lab, battery electromagnet lab
11/10	5 days	**Unit 11 mechanical waves** SP4. (a-b) Obtain, evaluate, and communicate information about the properties and applications of waves.	11&15	Pendulum lab, Making waves lab
11/17	5 days	**Unit 12 sound** SP4. (a-c) Obtain, evaluate, and communicate information about the properties and applications of waves.	12&15	Sound stations lab, resonance lab
12/1	5 days	**Unit 13 light and color** SP4. (a-b, d-e)) Obtain, evaluate, and communicate information about the properties and applications of waves.	13-15	Light activity, color algebra activity, After image lab
12/7	4 days	**Unit 14 optics** SP4. (f) Obtain, evaluate, and communicate information about the properties and applications of waves.	14	Online tutorial packet
Exams 12/16-12/17	5 days	Final Review 2 days of final exams	All Chapters	Final