

Regular Physics – 2009 Fall Semester Syllabus

Class Webpage: <http://www.quia.com/pages/rnell/page1>

- 8 / 24-25 Classroom guidelines, lab safety, scientific methods activity, and introduction to Physics
Homework: Download and print the Ch. 1 notes and bring to next class. Also bring requested materials.
- 8 / 26-27 Notes Ch 1- Scientific Reasoning and Experimental Settings, dimensional analysis, measurement, accuracy vs. precision, scientific notation & significant figures, graphing; Activity– Circumference/Diameter
Homework: Download and print the Ch. 2 notes from <http://www.quia.com/pages/rnell/page1> and bring to next class.
- 8 / 28-31** **Lab Safety Quiz (TEST GRADE);** Discussion of Lab from last class
Notes Ch 2 – Motion in one dimension; Problems and worksheets in class
- 9 / 1-2 Notes Ch 2 – Motion Graphs, linearization, slope, curve-fitting; Lab – Uniform Motion
- 9 / 3-4 Finish Notes Ch. 2; Lab – Accelerated Motion; Worksheets and Practice Problems Ch 2
- 9 / 8-9 Review and **Quiz Ch 1-2**
- 9 / 10-11** **TEST Ch 1- 2;** **Homework:** Download and print the Ch. 3 notes and bring to next class.
- 9 / 14-15 Notes Ch 3 – Two dimensional motion and Vectors; Lab – Acme Lab; Right angle or linear vector addition;
- 9 / 16-17 Notes Ch 3 – Projectiles and relative velocity; Problem-solving Ch 3
- 9 / 18-21 Lab – Range of a Projectile; Review Ch. 3
- 9 / 22-23 Review and **Quiz Ch 3**
- 9 / 24-25** **TEST Ch 3;** **Homework:** Download and print the Ch. 4 notes and bring to next class.
- 9 / 28-29 Discovery Lab – Newton’s Laws; Notes Ch 4 - Forces and the laws of motion;
Problem-solving Ch. 4
- 9/30 - 10/1 Lab – Newton’s 2nd Law; Worksheets and Problems Ch 4
- End of 1st Six Weeks**
- 10 / 2-5 Ch 4 Problems and worksheets; Lab – Calculating the Coefficient of Friction
- 10 / 6-7 Review and **Quiz Ch 4**
- 10 / 8-9** **TEST Ch 4;** **Homework:** Download and print the Ch. 5, 10 and 11 notes and bring to next class.
- 10 / 13-14 Discovery Lab – Work and Energy; Notes Ch 5 – Work and Energy;
- 10 / 15-16 Lab – Conservation of Energy; **Energy Conversions in Paper Cars – Construction Project Starts**
- 10 / 19-20 Lab – Human Power; Problem solving Ch 5
- 10 / 21-22 Notes Ch 10-11 – Thermodynamics; Worksheets and problem solving
- 10 / 23-26 Review and **Quiz Ch’s 5, 10 & 11**
- 10 / 27-28** **TEST Ch 5, 10 & 11; Homework:** Download and print the Ch. 6 notes and bring to next class. **Paper Cars due next class.**
- 10 / 29-30 Paper Cars performance testing. Notes Ch. 6 – Impulse-momentum theorem, and conservation of momentum
- 11 / 2-3 Notes Ch. 6 cont’d. Lab – Conservation of Momentum;
- 11 / 4-5 Worksheets and Problem solving Ch 6
- 11 / 6-9 Review and **Quiz Ch 6**
- 11 / 10-11** **TEST Ch 6;** **Homework:** Download and print the Ch. 7-8 notes and bring to next class.
- 11 / 12-13 Discovery Lab – Circular Motion; Notes Ch 7 – Uniform circular motion, gravitation, and satellite motion;
- End 2nd Six Weeks**
- 11 / 16-17 Finish Ch. 7. Discovery Lab – Torque; Notes Ch 8 – Rotational Equilibrium and Torque;
- 11 / 18-19 Finish Notes Ch 8; Lab – Rotational Equilibrium; Worksheets and Problem solving Ch. 7-8
- 11 / 20-30 Review and **Quiz Ch’s 7-8**
- Thanksgiving Break**
- 12/1 - 12/2 **TEST Ch 7-8** **Homework:** Download and print the Ch. 9 notes and bring to next class.
- 12 / 3-4 Notes Ch. 9 – Fluids; Lab- Archimedes’ Principle;
- 12 / 7-8 Finish Notes Ch. 9; Lab – Bernoulli’s Principle; Problem solving Ch 9
- 12 / 9-10 Review and **Quiz Ch 9**
- 12 / 11-14 **TEST Ch 9; Homework:** Download and print the notes Ch. 12: Part One and bring to next class.
- 12 / 15-16 Notes Ch 12 – Simple Harmonic Motion; Lab – Hooke’s Law
- 12 / 17-18** **Physics Olympics contests in class.**
- Winter Break**
- 1 / 4-6 Problem solving with Part one of Ch. 12: Springs and SHM
- 1 / 7-8 **TEST Ch 12: Springs and Simple Harmonic Motion**
- 1 / 11-12 Review for finals
- 1 / 13-15** **Fall Semester Finals**