

Regular Physics – 2012 Spring Semester Syllabus – KJ Lowry

Class Site = <http://www.quia.com/pages/klowry/page1>

- 1/17-18 Unit 7 Work, Energy and Power continued. Notes and problems. **HW:** Read Holt Ch. 5 and finish problems p. 193 #'s 2, 5, 7, 9, 10, 14, 16, 19, 28, 30, & 33.
- 1/19-20 Finish Notes Unit 7 – Power. Lab – Human Power. WS on Energy and power. Finish problems Ch 5.
- 1/23-24 Review and Quiz Unit 7. Prepare for test over All notes Unit 7 and Ch. 5.
- 1/25-26 Test Unit 7. HW: Print out and bring notes on Unit 8: Momentum.**
- 1/27-30 Notes Unit 8: Impulse and Momentum. **HW** Begin Text Problems Ch. 6 p.232 #'s 2, 5, 8, 10, 12, 15, 16, 17, 18, 21, 22, 26, 30, 32, 35, 37, and 39.
- 1/31-2/1 Lab – Conservation of Momentum; **HW:** Worksheets and Problem solving
- 2/2-3 Review for Test Unit 6. Take online quiz.
- 2/6-7 Test Unit 8 (Ch. 6) HW: Download, print and bring Notes Unit 9 (Ch. 17): Electrostatics**
- 2/8-9 Notes Unit 9 (Ch. 17) Electrostatics and Electric Force Fields. Problems and demos. **HW: Text ch. 17** p. 654-655 #'s 1-16, 19, 20, 28, 30, and 35
- 2/10-13 Finish Notes, Video & WS Online Lab. **HW:** Finish Text Problems
- 2/14-15 Review Unit 9. Online quiz. Prepare for Test Unit 9/ch17.
- 2/16-17 Test Unit 9(ch17). HW: Download, Print and bring notes Unit 10: Voltage Current, Resistance, and Circuits.**
- 2/20-21 Notes Unit 10 (Ch 19-20): Voltage, Current, Resistance, Power and Circuits. Lab - Ohm's Law. **HW:** Text Problems Ch. 19 p. 717-719 #'s 7, 9, 12-15, 18, 21, 28, 30, 32, 34, 36-38, and 40-43
- 2/22-23 Notes Unit 10. (Ch. 20) Video on circuits (Hewitt). Lab – Intro to Circuits. **HW:** Text ch. 20 p. 754-759 #'s 3, 6, 10, 11-13, 17, 18, 22-24, 35, 36, and 49.
- End of 4th Six Weeks*
- 2/24-27 Problem solving practice and WS on Unit 10. Lab – Series and Parallel circuits
- 2/28-29 Review Unit 10. HW: Online Quiz Unit 10 and Circuits. Prepare for test.
- 3/1-2 Test Unit 10 HW: Download, Print and bring notes Unit 11: Magnetism**
- 3/5-6 Notes Unit 11 (Ch. 21 – 22) Magnetism and Electromagnetic Induction. Lab : Properties of Magnets. **HW:** Text Ch. 21 p. 781 #'s 2,3,9,11,13,22,24,26,and 34-36
- 3/7-8 **TAKS – ELA.** Worksheets and practice problems with Unit 11. Video on em induction
- 3/9 and 3/19 **Practice** Science TAKS test in class. Handout info and rubric on Semester Project.
- Spring Break 3/12 – 3/16*
- 3/20-21 Lab – Electromagnetic Induction, electromagnets, motors and generators.
- 3/22-23 Review Unit 11: Magnetism. Virtual lab- EM induction. **HW:** Online Quiz Unit 11 & prepare for test.
- 3/26-3/27 Test Unit 11: Magnetism and Electromagnetic induction.**

- 3/28-29 Notes Unit 12 (Ch 12): Simple Harmonic Motion, Waves, and Sound. SHM– Springs and Pendulum; - Hooke’s Law Lab. **HW** Text ch. 12 p. 469 #'s 8-10,13, 18-22, and 56.
- 3/30-4/2 Notes Unit 12 –SHM Lab Period of Pendulum. **HW:** Finish Text problems for quiz.
- 4/3-4 Quiz over SHM Pendulum motion and Springs. Notes on Wave motion and Sound - demo of Waves and Sound. **HW:** Text Ch. 12 #'s 25, 27, 28, 31, 33, 35, 37, 40, 45, 48, & 50
- 4/5-10 Lab - Sound and Medium. Finish notes Wave Motion and Sound. Lab – Resonance and speed of sound. **HW:** Text ch.13. p.507-509 #'s 2, 7, 10, 11, 14, 21, 28, 30
- 4/11-12 Review Unit 12. **HW:** Study for Test U-12
End of 5th Six Weeks
- 4/13-16 Test – Unit 12: SHM, Waves, and Sound. HW: Download, Print and bring Unit 13 notes to class**
- 4/17-18 Notes Unit 13 (ch. 14-16): Light and Optics. Characteristics and behavior of Light waves. Lab – Reflection and Mirrors. **HW:** Text ch.14 pp. 550 #'s 6, 8-13, 16, 20, 21, 43 and 44
- 4/19-20 Worksheet on Plane Mirrors and reflection. Notes Unit 13 – Transmission and refraction of light, Snell’s Law and Convex lenses. Lab: Snell’s Law. **HW:** Text ch. 15 p. 587 #'s 6, 8, 10, 11, 13, 17, 20,26, 29, 31, & 35.
- 4/23-24 TAKS Science Review - go over practice test or review Biology, chemistry, and physics. Lab – Lenses. **HW:** Finish probs in Ch.14 and 15 assigned above
- 4/25-26 TAKS Tests – Math and Science. Worksheets: Ray diagrams w/plane mirrors and convex lens images. Problem solving Unit 13: Ch. 14 and 15
- 4/27 -30 TAKS Test – Social Studies on 27th. Finish Notes Unit 13 (ch. 16): Interference and diffraction. Demonstrations of light and diffraction. **HW:** Text probs Ch. 16 p.620 #'s 2, 7, 14, 15, 22, & 23.
- 5/1-2 Review Unit 13 in class. **HW:** Online Quiz Unit 13 (text chs. 14-16) and prepare for test.
- 5/3-4 Test Unit 13 (chs. 14-16). HW: Download, print, and bring notes Unit 14 to class.**
- 5/7-8 Semester Project Due.**
Notes Unit 14: Modern Atomic, Nuclear Physics and Relativity. Simulation Lab – Photoelectric Effect. **HW:** Text Chs. 23 & 25p. 856 #'s 4-7, 9, 10, 12, 29, &35.
- 5/9a Finish notes Unit 14. Lab – Radioactive decay and half-life.
- 5/10b-11a Review for EOC Physics (STAAR) Exam.
- 5/14b EOC Physics (STAAR) Exam.
- 5/15-16 Lab – Atomic Spectra. Finish notes Unit 14. Finish Text problems assigned above.
- 5/17-18 Lab – Radioactive Decay and half-life. Worksheet on Energy – mass equivalence and nuclear reactions.
- 5/21-22 Review Unit 14. Video on Modern nuclear physics and relativity. **HW:** Online quiz over Unit 14.
- 5/23-25 Semester Review for Exams
5/29-31 Exams