

Honors Physics Syllabus and Schedule - Fall 2012

We are beginning the 2nd semester of Honors Physics. Below is a matrix of what is required of each student. The total number of assignments and the required number of assignments may change a little for each category. The difference in what is required and what is given is to provide students with some flexibility.

1. All assignments are posted on my website. All students know what the assignment is, when it is due and what is expected.
2. All assignments are due when indicated or must be turned in on the day a student returns from an absence.
3. **No late assignments will be accepted** unless you have an unusual circumstance or you have made previous arrangements.
4. Except for Quizzes and Tests, **No make-up work will be given**. Students are allowed to miss a number of specified assignments due to absences without penalty. **No make up labs** will be allowed. You are allowed to miss 2 labs without penalty.
5. You may turn in all scheduled assignments. All work turned in will count. I will drop the lowest scores as specified in each category at the end of the semester unless the score helps your grade. Getting good grades counts!

Assessments	Total Number of Scheduled Assignments	Required Number of Assignments	Points Per Assignment	Minimum Points Required	Percent of Total Points	
Monday Homework	12	10	20	200	5.9%	51.9%
Friday Homework	12	10	30	300	8.9%	
Classwork Unit Packets (Weekly)	3	3	100	300	8.9%	
Classwork Assignments (Daily)	24	20	25	500	14.8%	
Lab Activities & Reports	8	6	50	300	8.9%	
Physics Projects (Progressive)	2	1	150	150	4.4%	
Quizzes	16	15	75	1125	33.3%	48.1%
Unit Tests	1	1	200	200	5.9%	
Final Exam	1	1	300	300	8.9%	
TOTALS	79	67		3375	100.0%	

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Monday Homework	Students will read the upcoming chapter and do some work related to the concepts. All work must be correct, complete and neat. Students must show their work. No sloppy or copied work will be accepted. All work is due before you sit down.
Friday Homework	Students will do some work related to the chapter concepts. All work must be correct, complete and neat. The DRS method will be required. Students must show their work. No sloppy or copied work will be accepted. All work is due before you sit down.
Classwork Unit Packets (Weekly)	There will be 3 packets throughout the semester that students will complete during classtime. All work is expected to be correct, complete and neat. These packets will be graded as a whole.
Classwork Assignments (Daily)	There will be many classwork assignments given during the semester. All work will be due when specified. All work is expected to be correct, complete and neat.
Lab Activities & Reports	All Lab Reports must be typed. All labs should include a purpose, materials, data table, data acquisition, data analysis (physics concepts and formula) and a conclusion.
Physics Projects (Progressive)	Students can choose any physics concept or idea and turn it into a project, for example; build a physics demo, create an animation or website, write a book report or create a power point presentation for the class. Any idea is a good idea. Projects will be graded progressively.
Quizzes	Quizzes will be multiple choice and problem solving.
Unit Tests	

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	Weekly Concepts	Monday	Tuesday	Wednesday	Thursday	Friday
1	Jan 9-12 Thermodynamics Chapter 10	Welcome Back Concept Review Day Chapter 1			Chapter 10 Quiz Due: Ch 10- HW Practice Prob A - 3 Explain figs. 7, 8 Problems 7, 14, 29 STP 2, 4, 9	Furlough Day Read Chapter 11
2	Jan 16-20 Waves Chapter 11	MLK	Ch 11 Section 1 Due: Ch 11- HW Practice Prob A - 3 Practice Prob B - 2 Explain figs. 4, 10 Problem 8, 9, 14, 17	Ch 11 Section 2-3	Ch 11 Section 4	Chapter 11 Quiz Due: Ch 11- HW Practice Prob C - 5 Practice Prob D - 4 Explain figs. 11, 12, 16, 19, 20 Problems 19, 21, 23, 35, 36, 37, 47, 50
3	Jan 23-27 Sound Chapter 12	Review Day Ch 12-HW Exp fig 3 Sec 1 Review 3,5,6 How does an Ultrasound machine operate? Problems 6 STP 1,2,3				Chapter 12 Quiz Due: Ch 12- HW Explain Table 3 (draw the diagram and explain it! Section 1 Conceptual Challenge 2 Explain and show the Doppler Effect? Practice Prob B 3, 4 Problems 11, 12, 24, 25, 29, 36, 37, 38, 39, 40 STP 5, 7, 9, Draw a diagram and explain your answers!
4	Jan 30- Feb 3 Light Chapter 13	Review Day Chapter 2 Worksheets	Ch 13 Characteristics of Light -Electromagnetic Waves Reflection Flat Mirrors	Ch 13 - Reflection Flat Mirrors Concave Mirrors Optics Lab	Ch 13 - Reflection Convex Mirrors Color and Polarization	Chapter 13 Quiz Due: Ch 13- HW Problems 2, 11, 13, 14, 16, (17, 18, 19), (20, 23, 25, 30, 34, 35, 36), (37, 38, 40, 42), 46, 52

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5	Feb 6-10 Refraction Chapter 14	Review Day Chapter 3 Problems Practice A - 1, 2 Practice B - 1, 2, 3	Ch 14 - Refraction Snell's Law Optics Lab	Ch 14 - Refraction Converging Convex Lenses	Ch 14 - Refraction Diverging Concave Lenses	Chapter 14 Quiz Problems (10, 11, 13, 14), (17, 18,20, 24), 27, 38, 39, 42, 43, 44, 45, 47, 51, 56, 57, 60, 64
6	Feb 13-17 Interference and Diffraction Chapter 15	Review Day Chapter 3 Problems Practice C - 1, 2 Practice D - 1, 3			Unit 1 Test REview	Unit Test 1 Waves, Sound and Light
7	Feb 20-24	Break	Break	Break	Break	Break
8	Feb 27-Mar 2 Electric Forces and Fields Chapter 16	Review Day Properties of Waves	Review Day Properties of Waves			No Quiz Chapter 16 Problems: 3, 10, 16 Use Diagrams STP: 1, 3, 4, 5, 6 Explain your answers

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9	Mar 5-9 Electric Forces and Fields Chapter 16	Concept Review Day Chapter 3 Problems 22,26,34				Chapter 16 Quiz Problems: 17, 25, 26, 27, 31, 34,35,37, 40, 41, 44, 45, 46, 50 STP: 2, 7, 8, 9, 10, 13, 15, 16, 17, 18
10	Mar 12-1 Electric Energy and Current Chapter 17	Concept Review Day Chapter 4 Problems 10, 12, 22 STP 8, 9				Chapter 17 Quiz Problems: 7, 8, 13, 18, 35, 40, 41, 51, 59, 61, 62, 63 STP: 1, 2, 7, 8, 11
13	Mar 19-23 Circuits Chapter 18	Concept Review CH 18 Practice Problems pg 650 1 and 5				Chapter 18 Quiz Problems: 3, 10, 11, 12, 17, 18, 20, 21, 22, 23, 25, 26, 36, 38 STP: 1 - 11
12	Mar 26-30 Magnetism Chapter 19	Concept Review Day Chapter 6 Chapter 18 Quiz				Chapter 19 Quiz Problems: 20, 22, 23, 26, 30, 31, 32, 34, 35, 38, 40 STP: 5, 6, 10, 11, 12

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13	Apr 2-6	SB	SB	SB	SB	SB
14	April 9-13 Electromag Induction Chapter 20	Furlough	Physics Review Test 40 MC Questions 150 pts		Block Schedule 1-3-5	Block Schedule 2-4-6
15	April 16-20	Chapter 20 Review	Block Schedule 1-3-5 Chapter 20 Quiz Problems; 5, 7, 9, 11, 32, 34, 35, 37 STP: 1, 2, 3, 5, 9 Physics Review Chapter 2-3	Block Schedule 2-4-6 Chapter 20 Quiz Problems; 5, 7, 9, 11, 32, 34, 35, 37 STP: 1, 2, 3, 5, 9 Physics Review Chapter 2-3	Physics Review Chapter 4-5 Small Groups Classwork Quiz	Physics Review Chapter 6-7 Small Groups Classwork Quiz
16	Apr 23-27	Physics Review Chapter 9-10 Small Groups Classwork Quiz Online Quiz 2	Block Schedule 1-3-5 Physics T Review Chapter 9-10 Small Groups Classwork Quiz	Block Schedule 2-4-6 Physics Review Chapter 11-15 Small Groups Classwork Quiz	Block Schedule 1-3-5 Physics Review Chapter 11-15 Small Groups Classwork Quiz	Block Schedule 2-4-6 Physics Review Chapter 16-20 Small Groups Classwork Quiz Online Quiz 1

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17	Apr 30 - May 4	Physics Review Chapter 16-20 Classwork Quiz Online Quiz 2	Science CST	Science CST	Furlough	Furlough
18	May 7-11	Special Relativity Classwork Packet	Special Relativity Classwork Packet	Special Relativity Classwork Packet	Special Relativity Classwork Packet 100 pts	S Relativity Quiz 75 Points
19	May 14-18	Cosmology Classwork Packet	Cosmology Classwork Packet	Cosmology Classwork Packet	Cosmology Classwork Packet 100 pts	Cosmology Quiz 75 Points
20	May 21-25	Quantum Physics Classwork Packet All Projects are due.	Quantum Physics Classwork Packet	Quantum Physics Classwork Packet	Furlough	Furlough

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21	May 28- Jun 1	Memorial Day	Quantum Physics Classwork Packet	Quantum Physics Classwork Packet	Quantum Physics Classwork Packet 100 pts	Quantum Physics Quiz 75 points
22	Jun 4-8	Final Review 300 Points	Finals	Finals	Finals	Checkout