

# Unit 4 Outline – Waves

SPH3U

Test on Tuesday, December 20<sup>th</sup>

Lab due on Friday, December 16<sup>th</sup>

Musical Device Project due on Wednesday, January 11

Day	Section	Homework (peer/self-marked)	Complete	Level
1	8.1 and 8.2 – Vibrations and Waves, and Types of Mechanical Waves	Read 8.1 and 8.2 Pg. 380 #1, 2, 4, 5 Pg. 384 #1-3, 5, 6, 9		
2	8.3 – Wave Characteristics	Read 8.3 Handout #1-12		
3	8.4 – Wave Speed	Read 8.4 Pg. 389 #1-3 Pg. 391 Practice (top) #1-3 Pg. 391 (bottom) #2, 4-7		
4	8.5 – Properties of Sounds Waves	Read 8.5 and 8.6 Pg. 393 #1-3 Pg. 394 #2, 3 Pg. 397 #2, 4, 5, 9 Challenge: #10 Pg. 399 #2		
5	9.1 – Interference of Waves	Chapter 8 Quiz Read 9.1 Pg. 419 (bottom) #1, 2 Handout #1, 2, 3, 6-8		
6	9.2 – Waves at Media Boundaries	Read 9.2 9.2 Handout #1-5, 7-10		
7	9.2 – Waves at Media Boundaries (Continued)	Pg. 425 #2, 3 Pg. 426 #1, 2, 4-7		
8	Resonance in a Closed Air Column Lab	Pre-lab Quiz See lab handout (all answers on this handout) and Excel graph printout		
9	Lab (Continued)	See lab handout (all answers on this handout) and Excel graph printout		
10	9.3 and 9.4 – Beats, Damping and Resonance	Read 9.3 and 9.4 Pg. 429 #1-3 Pg. 432 #1-3		
11	9.5 – The Doppler Effect	Chapter 9 Quiz (9.1-9.4) Pg. 435 Practice (top) #1 Pg. 435 #1-4		
12	Review	Chpt. 8 Review: pg. 408-411 #1-5, 7-17, 21, 23, 25, 26*, 27, 29*, 30*, 33*, 37, 41*, 42, 44, 48*, 50* Chpt. 9 Review: pg. 442 #1, 2, 4-28, 31 (terms)*, 32, 36, 38a*, 41, 47*, 48*, 49*, 57*, 58abc*		
13	Begin Unit 5 - Electromagnetism			
14	Test – Tues., Dec. 19			

Level 4: Completely understand; got every question correct.

Level 3: Mostly understand; got almost all questions correct.

Level 2: Have few questions; got a few things right, a few things wrong.

Level 1: I still don't understand this; got only a couple things right.

Level R (Review): I do not get this at all; did not get anything right.

If you are level 1 or 2, you will want to try some more questions for practice before the test. You may also want to ask for help outside of class or to attend Physics Help. If you are level R, you should definitely ask for help outside class or attend Physics Help.