Heat, Light, Sound - Phys 115- Spring 2015 -Three Rivers Community College

Professor Scanlon
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Text : Wilson, Buffa, Lou – College Physics – Seventh Edition – Prentice Hall

Content
Heat – Chapters 10, 11
Vibrations and Waves – Chapter 13
Sound – Chapter 14
Electromagnetic Waves/Light/Optics – Chapter 20.4, 22, 23, 24

Grading – Tests and quizzes 55%, lab 25%, final exam 20%
Tests every month, homework every class, quizzes about every class.

Expectations – Homework completed to the best of your ability. Work is legible, supported (show work – not just answers) and on time. Pay attention, take accurate notes and ask questions.

Lab – Lab is held every week. You must PASS the lab portion of the course in order to receive credit. Fail lab then you fail the course. Late lab reports are marked down 10% each week it is late. Labs more than three weeks late are not accepted. There will be one lab make up opportunity if you miss a class.

Lab reports – at a minimum need to show the following:

1. Show all data.
2. Do a sample calculation.
3. Answer questions. Use full sentences.
4. Conclusion. You must take a stand on your data by answering the following question: Does the experimental results match theory? Show why the results match/don't match the theory. Examine and explain error. Describe any problems. Suggest any improvements (What would you do differently if you had to repeat the experiment?) The conclusion is the most important part of the lab report. Show that you learned something. There should be a good discussion on the experiment – but don't rehash the procedure of the experiment. What can you conclude from the results? Really think about the lab.
   These are questions/statements you should address in your conclusion:
   a. Does theory match experiment? Describe the theory (usually an equation).
   b. Explain/show why the data supports or does not support the theory/equation.
   c. Examine and explain error.
   d. Describe any problems.
   e. Suggest any improvements. (What would you do differently if you had to repeat the experiment?)