

Student Learning Outcomes PHYS 260

15 March 2007

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|    | <b>Outcome: At the end of the course the student will be able to</b>  | How measured             |
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| 1  | Describe the concepts of temperature and heat   | Exams, Quizzes, Homework |
| 2  | Perform thermodynamic and calorimetric calculations   | Exams, Quizzes, Homework |
| 3  | Describe the kinetic theory of gasses   | Exams, Quizzes, Homework |
| 4  | Explain the first and second laws of thermodynamics   | Exams, Quizzes, Homework |
| 5  | Analyze electric force and field created by a system of charged particles   | Exams, Quizzes, Homework |
| 6  | Calculate the electric potential created by a system of charged particles   | Exams, Quizzes, Homework |
| 7  | Analyze and explain the behavior of simple AC and DC circuits with resistors, capacitors, and inductors.            | Exams, Quizzes, Homework |
| 8  | Explain the origin of magnetic fields   | Exams, Quizzes, Homework |
| 9  | Calculate magnetic fields and forces  | Exams, Quizzes, Homework |
| 10 | Analyze and present the results of actual measurements made in the laboratory including an error analysis           | Lab Reports              |
| 11 | Determine if the data taken in the laboratory is described by the theoretical model given and discuss discrepancies | Lab Reports              |