

**Grande Prairie Regional College
Academic Upgrading Department**

**Physics 0120
Course Outline**

OCT 22 1998

Instructor: Sukhvir Sandhu

Office: C112

Phone: 539-2866

Office Hours: 11:00 – 12:00 (M, T, R, and F) in C112
Or by appointment

Textbook: College Physics (3rd edition) by Jerry D. Wilson / Anthony J. Buffer.

Supplies: lined and plane paper, scientific calculator, colored pens or pencils, 2 or 3 plastic folders.

Lab Supplies: lab notebook, pencil, ruler, rubber, etc.

Course Goals: This course is designed to provide the student with an understanding of some basic concepts and principles of physical science involving heat, gases, and waves (water, sound, and light). The student will develop problem-solving skills and gain an appreciation of the role of physics in modern society.

Attendance: Regular attendance is expected from all students and is essential for passing the course. Students who miss classes will soon find themselves falling behind and failing. If you miss a class because of illness and other legitimate reason, please see me about catching up. A doctor's certificate will be required verifying an accident or illness before make up labs or tests will be considered.

Assignments, Labs, Tests, and Exams

There will be several assignments and tests throughout the term. There will also be a midterm and a final exam. Absence from a lab, test, or exam will result in a mark of zero unless there is documented medical reason. Assignments and lab reports should be handed in on the specified dates. If assignments and lab reports are late, the marks will be decreased by 10% per day and will not be marked once assignment / lab report has been turned to the rest of the class. There will be frequent quizzes. These quizzes will not contribute any marks towards the final exam; however,

the feedback will help you to do better in the tests, the midterm, and the final exam.

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| Evaluations: | Tests | 15% |
| | Assignments | 20% |
| | Lab Reports | 16% |
| | Mid-term Exam | 14% |
| | Final Exam | 35% |

Course Content:

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| Unit 1: | Introduction to Physics |
| Unit 2: | Kinetic Molecular Theory, Temperature, Heat |
| Unit 3: | Thermodynamics |
| Unit 4: | Vibrations and Waves |
| Unit 5: | Sound |
| Unit 6: | Physical Optics: The Wave Nature of Light |
| Unit 7: | Geometrical Optics: Reflection and Refraction of Light |
| Unit 8: | Mirrors and Lenses |

The 9-Point Grading System

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|-------------------------|-------|-----------|
| 9 or 8 (80 % and above) | ----- | Excellent |
| 7 or 6 (65 % to 79%) | ----- | Good |
| 5 or 4 (50% to 64%) | ----- | Pass |
| 3, 2, or 1 (below 50%) | ----- | Fail |