NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY PHY 102 – INTRODUCTION TO PHYSICS II (4 CR.)

Course Description

Surveys general principles of physics. Includes topics such as force and motion, energy, heat, sound, light, electricity and magnetism, and modern physics. Part II of II.

Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

4 credits

General Course Purpose

A college level course intended for students with non-technical majors who need a lab science. Students will gain an understanding of the physical principles involved in their everyday environment. The course will serve as an alternative physics course for those students having little or no algebra math skills.

Course Prerequisites/Corequisites

PHY 101 or equivalent.

Course Objectives

Upon completing the course, the student will be able to:

- Recognize and analyze qualitatively physics principles in a variety of problems and situations they encounter in their professional, personal, and educational activities
- Apply critical thinking to their respective occupational field and day-to-day life
- Use physics formulae to related to physical phenomena
- Collect and record experimental data and obtain meaningful results
- Communicate effectively on course related issues.

Major Topics to be Included

- Electricity
- Magnetism
- Light
- The Quantum Behavior of Nature
- Atomic and Molecular Spectra
- Radioactivity
- Astrophysics