



SYRACUSE UNIVERSITY

PHY 101 Major Concepts of Physics I (4 credits)

PHY 102 Major Concepts of Physics II (4 credits)

2020-2021

Faculty: Carl Rosenzweig, Ph.D., Professor, Department of Physics

Administrative Contact: Eric Young, Senior Associate Director, Project Advance

Physics 101-102 is the one-year introductory, non-calculus physics sequence offered at Syracuse University. This algebra-based course includes a regularly scheduled lab and provides the necessary physics background for health professionals and others who need physics but are not required to take a calculus-based course.

The grades for each of the two courses will be based on three exams and a comprehensive final examination. Performance on the labs counts as 25% of the total grade.

Course Outline

PHY 101

The course treats the traditional topics in Mechanics: Kinematics, Newton's Laws, Circular Motion, Gravity and Planetary Motion, Work, Energy, Momentum, Rotational Motion, Vibrations, and Kinetic Theory. Problem solving and conceptual understanding are both stressed.

PHY 102

The second semester of this sequence treats the subject of Electricity, Magnetism and Optics. The specific topics are Electric Charge, Electric Fields and Potentials, Electric Currents and Circuits, Magnetism and Electromagnetic Induction, Electromagnetic Waves, Optics and Introductory Modern Physics.

| Title/Author (Publisher) | Price Per Copy | Ordering Source |
|---|----------------|--|
| <i>College Physics: A Strategic Approach</i> , 4 th Edition; R. Knight, B. Jones and S. Field (Addison-Wesley) ISBN: 9780134609034 | \$292.60 | Pearson/Prentice-Hall Phone: 800-848-9500 |

Prices are subject to change.