

# PHYSICS (PHY) - ROCK COUNTY

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## Courses

### PHY 107 Foundations of Physics 3 Units

An Introductory course for non-Sci. majors, with particular emphasis on the development of modern theoretical concepts. Central topics: classical mechanics, electromagnetism, quantum theory, relativity theory; & some discussion of historical & philosophical aspects. May be offered without Lab work for three credits or with Lab for four credits. Check the local timetable for credits listed. Not open to those who have had one or more courses in college physics; does not apply toward engineering or physics majors, or toward the physics requirements for pre-professional courses. not open to those who have had PHY 141, PHY 201 or equivalent.  
PREREQ: HIGH SCHOOL ALGEBRA AND GEOMETRY OR CONSENT OF INSTRUCTOR ANTIREQ: NOT OPEN TO THOSE WHO HAVE HAD PHY 141, PHY 201 OR EQUIVALENT

### PHY 110 Physics for the Health Sciences 3 Units

A descriptive Intro to those basic concepts of physics which have application to human health in general & to the medical & paramedical professions in particular. Primary attention will be paid to the physics of various functions of the human body (e.g., muscular & skeletal motions, the several senses & neural processes) & to the physics of commonly used instruments & equipment.  
PREREQ: HIGH SCHOOL ALGEBRA AND GEOMETRY OR CONSENT OF INSTRUCTOR

### PHY 115 Energy and the Environment 3 Units

Intended for non-Sci. majors, this course will give students the necessary physics background to form opinions on energy questions. The physical laws of thermodynamics, electricity, magnetism, & nuclear physics will be discussed in connection with energy related topics such as thermal pollution, fossil fuels, nuclear power, solar power & other alternative energy sources. Some elementary calculations (at the level of high school algebra) are included in the material, but the emphasis will be on a conceptual understanding of the energy-related issues affecting society today.

### PHY 120 Physical Science 3 Units

Selected topics from physics, geology, & astronomy. Not intended for those planning to major in a physical Sci.; does not fulfill the prerequisites for any more advanced courses. May be offered without a Lab for three credits or with a Lab for four credits. Not open to those who have had PHY 141, PHY 201, or equivalent.

### PHY 141 College Physics I 4-5 Units

The study of mechanics, heat, wave motion & sound. Recommended for students majoring in business, elementary education, medical technology, pharmacy, pre-dentistry & pre-medical studies. Three hours of lecture & three -four hours of Lab-discussion per week or equivalent. Students may not receive credit for both PHY 141 & 201.  
PREREQ: MAT 105 OR CONSENT OF INSTRUCTOR ANTIREQ: PHY 201

### PHY 142 College Physics II 4-5 Units

A continuation of Physics 141. Electricity, magnetism, light, & some modern physics. Three hours of lecture & three-four hours of Lab-discussion per week or equivalent. Students may not receive credit for both PHY 142 & 202.  
PREREQ: A GRADE OF C OR BETTER IN PHY 141 OR CONSENT OF INSTRUCTOR ANTIREQ: PHY 202

### PHY 201 University Physics I 5 Units

The study of mechanics, heat, wave motion, & sound. Recommended for physical Sci. & engineering majors. Three hours of lecture, one hour of discussion, & three hours of Lab per week or equivalent. Students may not receive credit for both PHY 141 & 201.  
PREREQ: MAT 221 OR CONCURRENT ENROLLMENT WITH CONSENT OF INSTRUCTOR ANTIREQ: PHY 141

### PHY 202 University Physics II 5 Units

A continuation of Physics 201. Electricity, magnetism, light, & some modern physics. Students may not receive credit for both PHY 142 & 202.  
PREREQ: A GRADE OF C OR BETTER IN PHY 201 OR CONSENT OF INSTRUCTOR ANTIREQ: PHY 142

### PHY 205 Modern Physics 3 Units

Intro to atomic, nuclear, & solid state physics; kinetic theory, special relativity, & quantum theory.  
PREREQ: A GRADE OF C OR BETTER IN PHY 201 OR CONSENT OF INSTRUCTOR

### PHY 291 Topics in Physics 1-5 Units

An extended coverage of one or more topics in physics such as Env.al physics, energy, biophysics, mechanics, electricity & magnetism, electromagnetic radiation, statistical physics, solid state physics, relativity, quantum mechanics, & atomic & nuclear physics.  
PREREQ: CONSENT OF INSTRUCTOR

### PHY 299 Independent Study 1-3 Units

Indp. study under the supervision of an instructor. The work may, for example, consist of advanced Lab investigation into a particular topic or library research & writing of a paper on some subject of interest.