

PHYSICS (PHY)

PHY 1120 – Physics I

4 Credit hours

Introduces applied mechanical physics, which includes: Vector forces, moments, constant acceleration trajectories, friction, concepts of simple machines, rotary motion, work, power, energy, torque, simple harmonic motion, waves & sound, solid & fluid properties, heat & thermodynamics and kinetic theory of gases. Algebra-based.

Transfer: TAG, TM.

Prerequisites: MTH 0904, MTH 0953 with a 'C' or better

Corequisites: MTH 1210 or MTH 1370.

PHY 1120H – Physics I (Honors Component)

0 Credit hours

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: PHY 1120.

PHY 1130 – Physics II

4 Credit hours

Introduces applied mechanical physics, which includes: Electric field potential and forces, current and magnetic field integration over continuous charge/current distribution, quantum physics, atomic physics, nuclear physics, induction and inductance, resistance-capacitance and basic circuit analysis, EMF and electric power, electromagnetic waves, Kirchoff's Law, RLC circuits, Faraday's Law, conductivity, geometric optics, diffractions, interference, polarization.

Transfer: TAG, TM.

Prerequisites: MTH 0904, MTH 0953 with a grade of 'C' or better

Corequisites: MTH 1210 or MTH 1370.

PHY 1130H – Physics II (Honors Component)

0 Credit hours

Provides students with an academically challenging and enriching learning experience in preparation for completing the Rhodes State College Honors Program requirements. This honors course empowers students to create their own academic experiences through the completion of an honors learning project. The honors learning project is substantial, requires several weeks to complete, and includes a minimum of 15 hours of work. The student and the instructor must sign an Honors Contract within the first two weeks of the semester. This contract outlines the plans for the student's honors learning project and the date of submission.

Prerequisites: Acceptance into the Rhodes State College Honors Program

Corequisites: PHY 1130.

PHY 1220 – Physics I - Calculus Based

5 Credit hours

Introduces calculus-based classical physics: Newton's laws, fluids, thermodynamics, waves; for students in physical sciences, mathematics, and engineering.

Corequisites: MTH 1711.

PHY 1230 – Physics II - Calculus Based

5 Credit hours

Introduces classical physics as calculus based: Newton's laws, fluids, thermodynamics, waves; for students in physical sciences, mathematics, and engineering.

Prerequisites: PHY 1220 (with a "D" or better).