

# PHYSICS (PHYS)

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**PHYS S123 \*College Physics I**

4 credits (3+3)

GER. Algebra-based introduction to classical physics, including: kinematics, Newton's laws, momentum, work, energy, gravity, rotational motion, fluids, heat, temperature, and laws of thermodynamics. Special notes: Additional topics include oscillations and waves. The laboratory part is integrated in the course.

**Prerequisite:** MATH S152.

**PHYS S124 \*College Physics II**

4 credits (3+3)

GER. Algebra-based introduction to classical physics, including: Coulomb's law, electrical potential, electric circuits, capacitance, Kirchhoff's laws, magnetic fields, Faraday's law, electromagnetic waves, physical and geometric optics, and waves and particles. Special note: The laboratory part is integrated in the course.

**Prerequisite:** PHYS S123.

**PHYS S165 \*Introduction to Astronomy**

3 credits (3+0)

GER. Examination of the science of astronomy and its social consequences, with an emphasis on the interrelationships between astronomy and other sciences. Topics include astronomical concepts and tools, earth-based and satellite observation of light, the solar system, stellar astronomy, and cosmology.

**PHYS S211 \*General Physics I**

4 credits (3+3)

GER. Calculus-based introduction to classical mechanics, including: kinematics, Newton's laws, momentum, work, energy, gravity, rotational motion, oscillations, and fluids. Special notes: Additional topics include waves. The laboratory part is integrated in the course.

**Prerequisite:** MATH S251.

**PHYS S212 \*General Physics II**

4 credits (3+3)

GER. Calculus-based introduction to classical physics, including: Coulomb's law, electrical potential, electric circuits, capacitance, Kirchhoff's laws, Biot-Savart law, Faraday's law, and electromagnetic waves. Special notes: Additional topics include optics. The laboratory part is integrated in the course.

**Prerequisite:** PHYS S211.