

# Physics (PHYSICS)

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## **PHYSICS 7A Physics for Scientists and Engineers 4 Units**

**Department:** Physics

**Course level:** Undergraduate

**Terms course may be offered:** Fall, spring and summer

**Grading:** Letter grade.

**Hours and format:** 3 hours of lecture and 4 hours of laboratory/workshop per week. 6 hours of lecture and 8 hours of laboratory/workshop per week for 8 weeks.

**Prerequisites:** High school physics; Math 1A or 1AS; Math 1B or 1BS (which may be taken concurrently).

Mechanics and wave motion.

## **PHYSICS 7B Physics for Scientists and Engineers 4 Units**

**Department:** Physics

**Course level:** Undergraduate

**Terms course may be offered:** Fall, spring and summer

**Grading:** Letter grade.

**Hours and format:** 3 hours of lecture and 4 hours of laboratory/workshop per week. 6 hours of lecture and 8 hours of laboratory/workshop per week for 8 weeks.

**Prerequisites:** 7A, Math 1A-1B, Math 53 (may be taken concurrently). Heat, electricity, and magnetism.

## **PHYSICS 7C Physics for Scientists and Engineers 4 Units**

**Department:** Physics

**Course level:** Undergraduate

**Terms course may be offered:** Fall, spring and summer

**Grading:** Letter grade.

**Hours and format:** 3 hours of Lecture, 1 hour of Discussion, and 3 hours of Laboratory per week for 15 weeks. 6 hours of Lecture, 2 hours of Discussion, and 6 hours of Laboratory per week for 8 weeks.

**Prerequisites:** 7A-7B, Math 1A-1B, Math 53, 54 (Math 54 may be taken concurrently).

Electromagnetic waves, optics, relativity, and quantum physics.

## **PHYSICS H7A Physics for Scientists and Engineers 4 Units**

**Department:** Physics

**Course level:** Undergraduate

**Terms course may be offered:** Fall and spring

**Grading:** Letter grade.

**Hours and format:** 3 hours of Lecture, 1 hour of Discussion, and 3 hours of Laboratory per week for 15 weeks.

**Prerequisites:** High school physics; Math 1A; Math 1B (may be taken concurrently)

Honors sequence corresponding to 7A-7B-7C, but with a greater emphasis on theory as opposed to problem solving. Recommended for those students who have had advanced Physics on the high school level and who are intending to declare a major in physics. Entrance into H7A is decided on the basis of performance on an examination given during the first week of class or the consent of the instructor, and into H7B-H7C on performance in previous courses in a standard sequence. Students will receive no credit for H7A after taking 7A.

## **PHYSICS H7B Physics for Scientists and Engineers 4 Units**

**Department:** Physics

**Course level:** Undergraduate

**Terms course may be offered:** Fall and spring

**Grading:** Letter grade.

**Hours and format:** 3 hours of Lecture, 1 hour of Discussion, and 3 hours of Laboratory per week for 15 weeks.

**Prerequisites:** 7A, Math 1A-1B, Math 53 (may be taken concurrently)

Honors sequence corresponding to 7A-7B-7C, but with a greater emphasis on theory as opposed to problem solving. Recommended for