# PHYSICS AND PHILOSOPHY

**Directors of undergraduate studies:** Sarah Demers (sarah.demers@yale.edu) (Physics), Daniel Greco (daniel.greco@yale.edu) (Philosophy)

**PREREQUISITES**

Prospective majors in Physics and Philosophy are advised to begin taking the prerequisites during their first year, and to take at least two of the required philosophy courses by the end of their sophomore year. Prerequisites for this major are as follows: mathematics through calculus at the level of MATH 120; any introductory physics lecture sequence numbered 170 or higher; PHYS 165L and 166L, or PHYS 205L and 206L.

**REQUIREMENTS OF THE MAJOR**

Beyond the prerequisites, students take fourteen term courses, including the senior requirement. Seven courses in physics approved by the director of undergraduate studies (DUS) and numbered 295 or higher are required, including PHYS 301 or equivalent and either PHYS 439 or 440. Six courses in Philosophy or in History of Science, Medicine, and Public Health are required, including PHIL 125 and 126, one course in logic above the introductory level, and a philosophy seminar selected with the approval of the DUSs.

**SENIOR REQUIREMENT**

**B.S. degree program** Seniors must complete PHYS 471 and/or 472, only one of which may count toward the seven required physics courses.

**B.A. degree program** Seniors must complete one of the following: (1) PHIL 490 or 491 (senior essay); (2) PHIL 480 (tutorial) on an appropriate subject; (3) an appropriate philosophy seminar with the approval of the DUS in Philosophy.

### SUMMARY OF MAJOR REQUIREMENTS

- **Prerequisites** MATH 120; PHYS 170, 171, or higher; PHYS 165L, 166L, or PHYS 205L, 206L
- **Number of courses** 14 term courses beyond prereqs, incl senior req
- **Specific courses required** PHYS 301 or equivalent; PHYS 439 or 440; PHIL 125, 126
- **Distribution of courses** 7 physics courses numbered 295 or higher approved by DUS; 6 courses in PHIL or HSHM, incl 1 in logic above intro level and a PHIL sem, as specified
- **Senior requirement** *B.S.* – PHYS 471 and/or 472 (only one of which may count toward the 7 required physics courses); *B.A.* – PHIL 490 or 491, PHIL 480 on appropriate topic, or approved PHIL sem

**Prerequisites**
Physics and Philosophy

- MATH 120
- PHYS 170, 171, or higher
- PHYS 165L, 166L, or PHYS 205L, 206L

Requirements for the B.S. degree and the B.A. degree

14 courses (14 credits), including the senior requirement but not the prerequisites

- PHYS 301 or equivalent
- PHYS 439 or PHYS 440
- 5 additional physics courses numbered 295 or higher
- PHIL 125
- PHIL 126
- 4 additional courses in PHIL or HSHM
  - including 1 logic course above the introductory level
  - including 1 philosophy seminar
- B.S Degree only: PHYS 471 and/or PHYS 472 (only one of which may count toward the 7 required physics courses)
- B.A. Degree only: PHIL 490 or PHIL 491, PHIL 480 on an appropriate topic, or an approved philosophy seminar