



# University Bulletin

## Undergraduate Degree Programs

### Physics (PHYS)

**PHYS 400** Intermediate Electricity and Magnetism I (3) Electrostatics, steady-state magnetic field; electrical and magnetic properties of matter; Maxwell's equations, boundary-value problems, and wave propagation.

#### **PHYS 400 Intermediate Electricity and Magnetism I (3)**

A second undergraduate course in electricity and magnetism, required of all physics majors who typically take it in their fifth/sixth-semester. The course includes a review of vector calculus, and in-depth discussions of electrostatics, magnetostatics, time varying electric and magnetic fields, and electromagnetic waves. Students are encouraged to take the MATH 405 and 406 sequence while they are in Physics 400.

This course is a prerequisite only for Physics 401 which is a second-semester extension.

General Education: None

Diversity: None

Bachelor of Arts: None

Effective: Spring 2007

Prerequisite: **MATH**

[250/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=MATH|250|latest](#)) or [MATH 251/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=MATH|251|latest](#)) ; [MATH 230/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=MATH|230|latest](#)) or [MATH 231/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=MATH|231|latest](#)) ; [PHYS 212/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=PHYS|212|latest](#)) , [PHYS 213/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=PHYS|213|latest](#)) and [PHYS 214/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=PHYS|214|latest](#))

Concurrent: **MATH**

[230/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=MATH|230|latest](#)) OR [MATH 231/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=MATH|231|latest](#)) ; [PHYS 204/bulletins/bluebook/university\\_course\\_descriptions.cfm?letter=P&courselong=PHYS|204|latest](#))

**Note** : Class size, frequency of offering, and evaluation methods will vary by location and instructor. For these details check the specific course syllabus.

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