



# Physics

## Physics Courses

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### **PHYS 5300 Thermal and Statistical Physics (3 credits)**

Principles of thermodynamics and statistical mechanics. Topics include temperature, the laws of thermodynamics, entropy, heat engines and refrigerators, free energy, and Boltzmann and quantum statistics. Prerequisites: Licensed Physics Teacher or B.S. Degree in Physics.

### **PHYS 6030 Survey of Electronics (3 credits)**

A broad survey of the principles of electronics. Topics include series and parallel circuits, Kirchhoff's rules, capacitors and inductors, and digital ICs. Prerequisites: Licensed Physics Teacher or B.S. Degree in Physics.

### **PHYS 6040 Survey of Optics (3 credits)**

An introduction to modern optics, with emphasis on geometric optics. Wave optics will be introduced sufficiently to enable interpretation of diffraction, interference, and laser effects. Prerequisites: Licensed Physics Teacher or B.S. Degree in Physics.

### **PHYS 6050 Modern Physics (3 credits)**

## All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS