

Division of Science and Allied Health

Dr. Mary Turner, Dean

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NOTE: The University of California has a credit restriction on certain combinations of physics courses. See your counselor for detailed information on the current UC Articulation Agreement.

PHYS 310 Conceptual Physics 3 Units

Prerequisite: None

Advisory: Math 34 (Pre-algebra) with a grade of "C" or better, or placement through the assessment process.

General Education: AA/AS Area IV; CSU Area B1; IGETC Area 5A
Course Transferable to UC/CSU

Hours: 54 hours LEC

This course presents the physical laws that tie together the diverse phenomena of nature. This course uses a descriptive approach, with limited use of basic algebra, to increase the students' understanding of the everyday physical world.

PHYS 350 General Physics 4 Units

Prerequisite: High School Trigonometry or MATH 334 with a grade of "C" or better.

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This course is a non-calculus based survey of general physics. It is designed for biological science students, including those in pre-medical, pre-dental, optometry, agricultural, and forestry programs. Topics include kinematics, Newton's Laws, dynamics of rigid bodies, work and energy, momentum, rotational motion, fluids, and oscillatory motion.

PHYS 360 General Physics 4 Units

Prerequisite: PHYS 350 with a grade of "C" or better

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This course is a non-calculus based survey of general physics. It is designed for biological science students, including those in pre-medical, pre-dental, optometry, agricultural, and forestry programs. Topics include electric charge, electric fields, AC and DC circuit theory, electromagnetism, optics, wave theory, and quantum physics.

PHYS 410 Mechanics of Solids and Fluids 5 Units

Prerequisite: None

Corequisite: MATH 401

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 55 hours LEC; 54 hours LAB ; 17 hours DIS

Topics covered include linear and rotational motion, Newton's laws, dynamics of rigid bodies, harmonic motion, and liquids. This course is for physics, mathematics, chemistry, architecture, and engineering majors.

PHYS 420 Electricity and Magnetism 5 Units

Prerequisite: MATH 401 and PHYS 410 with grades of "C" or better

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 55 hours LEC; 54 hours LAB ; 17 hours DIS

This course presents an in-depth treatment of electricity and magnetism and stresses problem-solving. Topics covered include charge and electric force, electric fields, electrical potential, magnetism, electromagnetic induction, DC and AC circuit theory. This course is for physics, mathematics, chemistry, architecture, engineering, and computer science majors.

PHYS 430 Heat, Waves, Light and Modern Physics 5 Units

Prerequisite: PHYS 410 with a grade of "C" or better

Corequisite: MATH 402

General Education: AA/AS Area IV; CSU Area B1; CSU Area B3; IGETC Area 5A

Course Transferable to UC/CSU

Hours: 55 hours LEC; 54 hours LAB ; 17 hours DIS

Topics include thermodynamics, wave theory, light and sound, geometrical and physical optics (including lenses and mirrors), quantum physics and high-energy physics. This course is intended for physics, mathematics, chemistry, architecture and engineering majors.

PHYS 494 Topics in Physics .5-4 Units

Prerequisite: None

Course Transferable to UC/CSU

Hours: 54 hours LEC; 54 hours LAB

This course is designed to enable both science and non-science students to learn about recent developments in physics. Selected topics would not include those that are part of current course offerings. This course may be repeated for credit, providing there is no duplication of topics.

PHYS 495 Independent Studies in Physics 1-3 Units

Prerequisite: None

Course Transferable to UC/CSU

Hours: 54 hours LAB

See Independent Studies

PHYS 499 Experimental Offering in Physics .5-4 Units

Prerequisite: None

Course Transferable to UC/CSU

Hours: 54 hours LEC; 36 hours LAB

See Experimental Offerings