

PHYS 101

Physics for Nonscientists

3 Credit Hours

This course discusses the scientific method. Newton's laws of dynamics, thermal physics, laws of electromagnetism and optics, nuclear and modern physics.

of sound. The course does not assume a prior knowledge of physics. Integrated Lecture and Laboratory 4. High School Algebra.

PHYS 201

General Physics I

4 Credit Hours

Pre/Corequisite: P (RQ) MATH-113 or MATH-201 and competency in basic trigonometry, C: PHYSL-201 (RQ)

Topics explored in this course include kinematics, Newton's laws of dynamics, periodic motion, fluid and solid mechanics, heat and thermodynamics. The course also includes the application of physical principles to related scientific disciplines including life sciences. Lecture 3, Laboratory 3. Offered fall and summer.

PHYS 202

General Physics II

4 Credit Hours

Pre/Corequisite: P (RQ) PHYS-201, C: PHYSL-202 (RQ)

Topics explored in this course include electricity and magnetism, Gauss', Ampere's and Faraday's laws, wave motion, laws of geometrical and physical optics, and introduction to modern physics. Lecture 3, Laboratory 3. Offered spring and summer.

PHYS 211

University Physics I [Calculus Based]

5 Credit Hours

Pre/Corequisite: E (RQ) MATH-201 or concurrent registration in MATH-201 with consent of instructor, C: PHYSL-211 (RQ)

Topics explored in this course include kinematics, Newton's laws of dynamics, periodic motion, fluid and solid mechanics, heat and thermodynamics with a more mathematical treatment than PHYS 201. Lecture 4, Laboratory 3. Offered fall.

PHYS 212

University Physics II [Calculus Based]

5 Credit Hours

Pre/Corequisite: P (RQ) PHYS-211, MATH-202 or concurrent registration in MATH-202, C: PHYSL-212 (RQ)

Topics explored in this course include electricity and magnetism, Maxwell's laws, wave motion, laws of geometrical and physical optics and introduction to modern physics. Lecture 4, Laboratory 3. Offered spring.

PHYS 250

Special Topics: Physics of Sound

3 Credit Hours

This course is a basic introduction to the physics of sound. Topics include physics of vibrations and waves, harmonic decomposition of wave forms, propagation of sound waves in air, standing waves and resonance, measurement of sound loudness, musical acoustics, and the physics of microphones, loudspeakers and digital media. Hands-on experimentation will be encouraged. The course is especially suited for students majoring in Music and Communication Sciences and Disorders, but also to anybody interested in the physics