

# PHYSICS (PHYC)

## PHYC 115, PHYSICS FOR THE ALLIED HEALTH SCIENCES 4 (6)

Study of general physics concepts including mechanics, thermodynamics, waves, and electricity and magnetism for students in the Allied Health sciences. Laboratory required. (A special fee will be assessed.)

**General Education:** IN1

**Course Entry Requirement(s):** Concurrent: MTHM 155 or MTHM 168.

**Typically Offered:** Fall and Spring Semesters

## PHYC 150, GENERAL PHYSICS I 4 (6)

Algebra-based physics course. Topics include linear and rotational kinematics, Newton's laws of motion, energy, momentum, equilibrium, temperature and kinetic theory, and thermodynamics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG, MTAG)

**General Education:** C3, IN1

**Course Entry Requirement(s):** Prerequisite: Successful completion of MTHM 155 or MTHM 174 or MTHM 176 or satisfactory placement assessment into college mathematics at a level above the prerequisite courses or division approval.

**Typically Offered:** Summer, Fall and Spring Semesters

## PHYC 152, GENERAL PHYSICS II 5 (7)

Continuation of PHYC 150. Topics include waves, sound, optics, electric and magnetic fields and forces and modern physics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG, MTAG)

**General Education:** C3, IN1

**Course Entry Requirement(s):** Prerequisite: PHYC 150 or division approval.

**Typically Offered:** Spring Semester

## PHYC 251, COLLEGE PHYSICS I 5 (7)

Calculus-based physics course designed for engineers and science majors. Topics include force, energy, momentum, rotation and thermodynamics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG)

**General Education:** C3, IN1

**Course Entry Requirement(s):** Prerequisite: MTHM 181

**Typically Offered:** Fall and Spring Semesters

## PHYC 252, COLLEGE PHYSICS II 5 (7)

Continuation of PHYC 251. Topics include electric fields and forces, magnetic fields and forces, wave theory, harmonic motion, wave interference, and modern atomic physics. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG)

**General Education:** C3, IN1

**Course Entry Requirement(s):** Prerequisite: PHYC 251 and MTHM 182 or division approval

**Typically Offered:** Fall and Spring Semesters

## PHYC 287, WORK-BASED LEARNING I - PHYC 1-3 (1)

This course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.

**General Education:** IN1, IN2, IN3, IN4

**Course Entry Requirement(s):** Prerequisite: Student must be pursuing a degree seeking program at LCCC; have completed 12 semester hours with a minimum of 6 semester hours in the discipline; have a minimum GPA of 2.5 in the discipline 2.0 overall; or have division approval.

**Typically Offered:** Offer as required

## PHYC 299, INDIVIDUALIZED STUDIES IN PHYSICS 1-3 (1)

An in-depth study of areas in physics presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to six (6) times for a total of six (6) credit hours.

**Typically Offered:** Offer as required