

PHZ: Physics (Continued) Courses

Courses

PHZ 3108L Physics Skills

College of Sci and Engineering, Department of Physics

1 sh (may not be repeated for credit)

Prerequisite: PHY 2049

A professional development course for students in physics. Introduction to necessary skills for upper division physics courses, including problem solving strategies, reading and interpretation of scientific papers, LaTeX, critical thinking, resumes, and communication of physics.

PHZ 3151C Introduction to Scientific Computing

College of Sci and Engineering, Department of Physics

3 sh (may not be repeated for credit)

Prerequisite: MAC 2312 AND PHY 2048

Scientific computation relevant to science, mathematics, and engineering, with emphasis on the process of modeling, simulation, visualization, and evaluation.

PHZ 3400 Phenomena in Condensed Matter Physics

College of Sci and Engineering, Department of Physics

3 sh (may not be repeated for credit)

Prerequisite: MAC 2313 AND MAP 2302 AND PHY 3106

This course is intended to introduce students to the basic phenomena and concepts related to condensed matter systems. It will cover structural, thermal, electrical, magnetic, and optical properties of solids and the experimental methods used to study these properties.

PHZ 4113 Mathematical Physics I

College of Sci and Engineering, Department of Physics

3 sh (may not be repeated for credit)

Prerequisite: MAC 2312 AND MAC 2313*

Algebra of complex numbers, Taylor series, linear algebra, vector algebra and calculus, and curvilinear coordinates. A grade of C or better is required for prerequisite courses.

PHZ 4114 Mathematical Physics II

College of Sci and Engineering, Department of Physics

3 sh (may not be repeated for credit)

Prerequisite: MAP 2302 AND PHZ 4113

This course is an application of mathematical methods to physics in areas including Fourier series, special functions, boundary value problems, partial differential equations, series solutions, and integral transforms. A grade of C- or better is required for prerequisite courses.