PHYSICS (PHS)

PHS 112 Introductory Physics for Biological and Health Sciences I 4 credits
This algebra/trigonometry-based course deals with mechanics and thermodynamics. Concepts are developed mathematically and applied to practical situations with special emphasis on biologically relevant examples. Students make use of a wide variety of laboratory equipment and sensors to procure and analyze data surrounding these concepts. The course meets for three lecture periods and one lab period each week.

PHS 113 Introductory Physics for Biological and Health Sciences II 4 credits
This algebra/trigonometry-based course deals with the areas of electricity, magnetism, light, optics, and modern physics. Concepts are developed mathematically and applied to practical situations with special emphasis on biologically relevant examples. Students make use of a wide variety of laboratory equipment and sensors to procure and analyze data surrounding these concepts. The course meets for three lecture periods and one lab period each week.

PHS 221 General Physics I (Calc Based) 4 credits
This calculus-based course deals with the areas of mechanics, thermodynamics, and wave motion. Physics' concepts related to these topics are presented, applied to practical situations, and measured and analyzed in the laboratory setting. Students make use of the computer as a tutorial aid, use a great variety of laboratory equipment (including sensors along with the computer) to procure and analyze data, and use selected software to demonstrate physics' concepts and model practical situations. The Internet and literature are used to obtain current information. The course is applicable to students majoring in pre-medicine, pre-engineering, biology, chemistry, mathematics, and science education. (Prerequisites: One year of high school physics and Calculus I)

PHS 222 General Physics II (Calc Based) 4 credits
This calculus-based course deals with the areas of electricity and magnetism, light and optics and modern physics. Physics' concepts related to these topics are presented, applied to practical situations, and measured and analyzed in the laboratory setting. Students make use of the computer as a tutorial aid, use a great variety of laboratory equipment (including sensors along with the computer) to procure and analyze data, and use selected software to demonstrate physics' concepts and model practical situations. The Internet and literature are used to obtain current information. The course is applicable to students majoring in pre-medicine, pre-engineering, biology, chemistry, mathematics, and science education. (Prerequisite: PHS 221)

PHS 488 Physics Independent Study 1-4 credits