

Science Courses

Biology

Required for students in grade 9, 10

Prerequisites: None

Credit: Successful completion of this year long course will result in 1 earned high school Science credit.

This course explores the living world emphasizing biological interactions in everyday life. Students will investigate cell biology, genetics, evolution, ecology, cellular respiration, and the diversity of life. Concept oriented information, laboratory experiences, and technology are emphasized.

College Biology 111

Available for students in grades 11, 12

Prerequisites: Freshman Biology and college entrance requirements.

Credit: Successful completion of this year long course will result in 1 earned high school Science credit and 4 college credits.

Emphasizes cell chemistry, cell structure and function, metabolism and energy, molecular biology, genetics, and biotechnology, as well as related laboratory experiences. For biology majors and minors, or students planning to transfer to pre-professional programs requiring biology.

Anatomy and Physiology

Available for students in grade 11, 12

Prerequisites: Earned C+ or better in Biology, 11th grade students must also have faculty approval

Credit: Successful completion of this year long course will result in 1 earned high school Science credit

This intensive course is designed for students that are interested in pursuing careers in the fields of medicine or applied sciences. Students will explore concepts of the parts and functions of the human body, as well as cellular, molecular, gross anatomy and physiology of the human body. Learning activities will integrate laboratory work, including dissection, with reports and project work.

Physics

Available for students in grade 11, 12

Prerequisites: Must have successfully completed Algebra II

Credit: Successful completion of this year long course will result in 1 earned high school Science credit

In this course, students will explore the mathematical trends in the physical world. Concepts examined will include 1 and 2 dimensional motion, types of energy, heat, sound, light, and electricity. Problem solving and qualitative ideas will be emphasized. Students will practice scientific method of experimenting, recording and analyzing data.

Chemistry I

Required for students in grades 10, 11

Prerequisites: Student must have successfully completed Algebra I

Credit: Successful completion of this year long course will result in 1 earned high school Science credit.

Introductory chemistry concepts are presented with emphasis on the formation of solid study habits and methods of problem solving. Topics discussed will include atomic and molecular theory, the periodic table, chemical nomenclature, chemical equations and reactions, stoichiometry, chemical equilibrium and acid/base chemistry. Students will also participate in laboratory exercises, as well as student demonstrations to illustrate general chemical principles.

College Chemistry 111

Available for students in grades 11, 12

Prerequisites: Student must have successfully completed Chemistry I and completed Algebra II with an overall grade of B or better and faculty recommendation in addition to college entrance requirements.

Credit: Successful completion of this year long course will result in 1 earned high school Science credit and 4 College Credits

With adequate background in beginning chemistry, problems solved in these fields: inorganic, physical, analytical and organic. Laboratory exercises illustrate general principles. Course meets transfer requirements toward B.S. degrees in sciences.