



BIO-MED

SCIENCE ACADEMY

Freshman Year

Biology – The course explores the fundamental concepts in biology with a molecular approach to the study. Students learn basic concepts about the life-sustaining processes that occur within the cell, the anatomy and physiology of complex multi-cellular organisms, how all the Earth's systems are interconnected and the ways by which various life forms have adapted to the environment. Mastery of the concepts will occur through interdisciplinary projects, discovery/ inquiry methods to approach experimentation and research. **Course Fee \$35**

Introduction to Engineering Design - Expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. **Course Fee \$35**

Foundations in Algebra - Reinforce content from middle grades mathematics (solving equations, graphing linear relationships, arithmetic operations, etc.) and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. **Course Fee \$20**

Algebra II - Introduction to functions, systems of linear equations, exponents, polynomial operations, scientific notation. Factoring polynomials, solving quadratics by factoring, radicals and rational exponents will also be included. **Course Fee \$20**

English Language Arts I – This course will focus on developing reading and writing skills necessary for success in high school and in the world beyond. Writing skills will include the writing process, writing conventions and research standards. APA and MLA formats will be introduced as well as formal letter writing. Various genres of literature will be utilized to gain mastery in reading comprehension and analysis. In addition, fundamental concepts of vocabulary, grammar and communication will be studied within the curriculum. **Course Fee \$20**

US/World History I – This introductory course will engage students in the study of the social and philosophical relationships humans and nations have with their environment as it relates to key events in US and world history from 1600 C.E. to the onset of World War I. **Course Fee \$20**

Mandarin Chinese – Students will be introduced to the Chinese language and culture, stressing effective communication skills in both the written and spoken language and an understanding of the practices of Chinese culture. **Course Fee \$20**

Technology I - This introductory course will expose students to the world of technology and teach them how to use and navigate a wide variety of resources, software and equipment. Students will also brush up on their typing skills. **Course Fee \$20**

General instruction Fee - \$30

Freshman Consumable Fee Total- \$200

