NHS SCIENCE DEPARTMENT



Welcome

The Science Department offers study of the four major scientific disciplines as a primary part of a comprehensive high school educational experience in preparation for successful entry into our increasingly technological and complex world. All students - whether they become technicians in a hospital, marketing analysts in business, graphic designers in the arts, product engineers in manufacturing, or PhD researchers - must have a solid foundation in science education. It is essential that each student challenge and explore the fundamentals of Earth & Space Sciences, Biology, Chemistry, and Physics through a core program of study. Each of these disciplines and their core courses examine critical aspects of the natural world in order for all students to become scientifically literate; having the knowledge and understanding of scientific concepts and processes required for personal decision making, participation in civic and cultural affairs, and economic productivity.

Science Department Welcome Video (8 min)

Regents Science Course Sequence & Pathways

Students are encouraged to challenge the most rigorous program of Regents Science courses in which they can be successful.





Scientific Investigation (SI) courses are rigorous, honors science classes for highly motivated students who display organizational and study skills, self-discipline and dedication to task. SI classes are open enrollment; however, students and parents should consider whether they are well prepared for this challenging, faster paced, and in-depth course of study.

A complete sequence chart of science department courses can be found here Science Core **Course Sequence Chart**

Advanced Placement & International Baccalaureate Courses



The department offers science courses designed to expose students to content and inquiry beyond the scope of the fundamental scientific disciplines. Students considering future university study in science or science-related fields are encouraged to consider challenging Advanced Placement (AP), International Baccalaureate (IB), Dual Enrolment as well as Science Research courses.

> AP Biology **IB Biology SL** AP Chemistry **IB Chemistry SL IB Physics HL** AP Physics 1 & 2

AP Environmental Science

Courses Available for College Credit

Dual enrolment courses work in concert with the Long Island University High School Scholars Program for potential college credit. These courses may be taken in 11th grade concurrently with a core Regents Science course or as an elective in the senior year. This ensures that our students graduate with the necessary skills to continue their education.

Science Research The Science Research Program provides students who have a strong interest in science with the opportunity to participate in independent, high-level research activities that go beyond our extensive classroom curriculum. Students in the program learn science inquiry skills and

Medical Anatomy & Physiology **Forensic Science**



Science Research Video (3 min)

Science Research Infographic

Science research students refine their written and oral presentations for regional and national research competitions, including the Siemens MST competition, Regeneron STS competition, LISEF and the LI Science Congress. The culmination of the research track is a mentored research experience that includes the development of an independent research project, often at a post-graduate level of complexity.



Science Electives

Science Electives

Science elective courses are designed to expose students to content and inquiry that develops specialized skills in order to broaden scientific knowledge and foster potential career pathways. These courses should be taken concurrently with or in addition to the core Regents sequence in Earth Science, Biology, Chemistry, and Physics.

> **Marine Science Astronomy**

LI Native Ecology & Plant Science



Environment Team



The Environment Team is a college preparatory, interdisciplinary, team-learning course sequence for seniors. Students investigate the interactions of human culture and the natural world through the lens of the major disciplines of English, social studies, science and physical education. Taught in an experiential fashion in and out of the classroom, knowledge and skills are acquired across the curriculum through avenues such as research, citizen science and environmental activism. Field experiences in authentic settings include legislative assemblies, historical venues and museums, unique geological and environmental sites, and county, state and national parks.

> **Environment Team Brochure with Alumni Testimonials Environment Team Infographic**

Extracurricular Activities

Elementary & Middle School Science and Engineering Fair & Expo Fall Elementary Family STEM Night Spring K-4 STEM Fair

Brookhaven National Lab Elementary Science & Engineering Fair Middle School Science Research & Broadcom MASTERS Competition Middle and High School Science Olympiads Junior & Senior Division Long Island Science Congress Long Island Science & Engineering Fair

Social Media Links

Contact Information





@NptSTEM





David Storch, Department Chairperson Kim Collins, Science Research Coordinator Bryan Horan, Science Research Coordinator David LaMagna, Greenhouse Coordinator

631-262-6704

david.storch@northport.k12.ny.us kimberly.collins@northport.k12.ny.us bryan.horan@northport.k12.ny.us david.lamagna@northport.k12.ny.us

For more information, visit the NEN website (http://web.northport.k12.ny.us/) under "Instructional Programs" tab - Science Department