



BIOLOGY & CHEMICAL TECHNOLOGY

PROGRAM OVERVIEW

Students in the Biology and Chemical Technology magnet will learn the techniques necessary to work in a college or industrial science lab. Students will understand the scientific approach to observation and inquiry. Students will also be well prepared to continue their education in laboratory sciences such as biology, environmental science, and chemistry. Students will be given the opportunity to explore various careers in science through shadowing and school to work programs.

Each student must do an individual research project that he or she will present in the end of the senior year. The projects vary as do the careers. Some examples of past projects include:

- Can methyl paraben in personal care products be quantified?
- Can oysters be reintroduced into the Hudson River?
- Is the oxybenzone in our suntan lotion really degrading?
- Can sunflowers be used to remove lead from water?

Students have presented their projects at local science fairs as well as ecological symposiums. Guest lecturers enhance our programs and enrich our students by sharing real world and career related experiences.

Student experiences are not limited to in-class activities. The course includes involvement with Community partners such as Groundwork Hudson Valley, The Center for the Urban River at Beczak, The science barge, and Trout in the classroom. Students can also take the AP exam in Environmental Science their senior year as well as earn credit from SUNY Westchester for their senior year.

ARTICULATION AGREEMENT: Westchester Community College

MAGNET EXIT PROJECT: Tech Prep Day

TECHNICAL SKILLS

Basic solution chemistry, Water Quality analysis, Soil analysis, Organism inventories, Bacteria culture, Algae culture, Basic hydroponics, Gel electrophoresis, Spectrophotometry, Light microscopy, Waste disposal, OSHA Safety Standards, Data analysis

CAREER OPPORTUNITIES

Biochemists and Biophysicists, Biological Technicians, Environmental Scientists, Environmental Engineers, Urban and Regional Planners, Environmental Law, Forensic Scientist, Doctor, Pharmacist, Teacher

SAUNDERS TRADES & TECHNICAL
HIGH SCHOOL