GENERAL INFORMATION

- All eighth grade students in Hunterdon County are eligible to apply. Out of county students will be considered based on availability of seats.
- Acceptance into the program will be based on placement test scores, attendance, discipline records, 7th & 8th grade grades, and an interview.
- Students will be bused from their home to North Hunterdon High School (NHHS), where the program is held. Home schools are responsible for transportation.
- The Academy program is designed for students to attend NHHS the entire day and for all four years of high school.
- Each BSA class is 60 minutes long.
- There are no fees for this program. The start up costs have been covered by grant funds and tuition is charged to the home school.
- After completing all the courses and academics necessary for graduation, students will graduate from the Biomedical Sciences Academy.
- Students will be eligible to earn college credits from at least one or more NJ colleges. Colleges may require a discounted tuition fee.

FOR MORE INFORMATION

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WWW.HCVSD.ORG

DID YOU KNOW?

Employment of biomedical engineers is projected to grow 23% from 2014 to 2024, much faster than the 7% average for all other occupations.

– Bureau of Labor Statistics

BIOMEDICAL SCIENCES ACADEMY
HUNTERDON COUNTY VOCATIONAL SCHOOL DISTRICT

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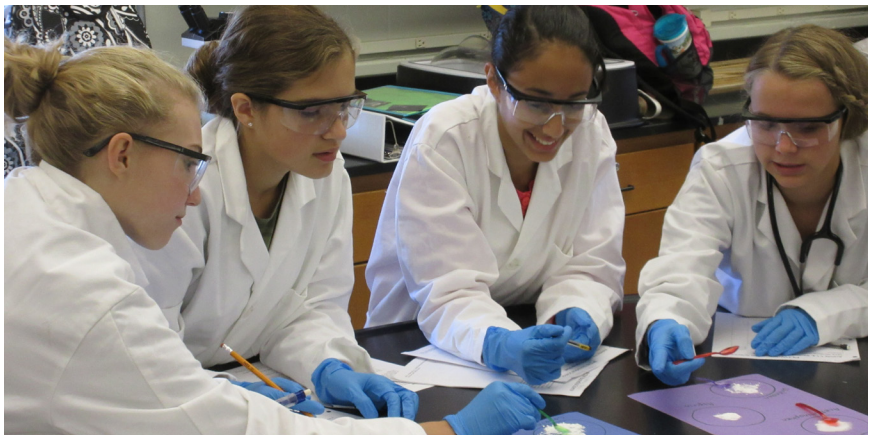
BIOMEDICAL SCIENCES

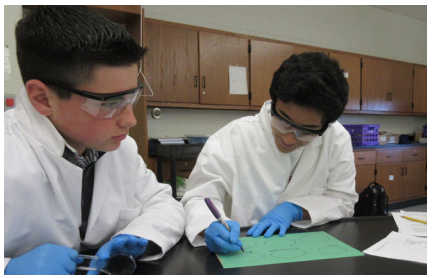
Biomedical Sciences Academy

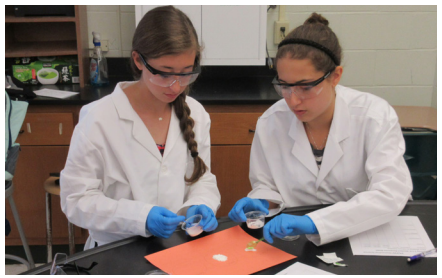
The Biomedical Sciences Academy (BSA) employs a rigorous, highly focused four-year program for students with career interests in the biomedical field. The BSA utilizes Project Lead the Way's curriculum in addition to college curriculum from Rutgers University. This program provides students with exposure to concepts of human medicine, physiology, genetics, microbiology, and public health. Students engage in activities like investigating the death of a fictional person to learn content in the context of real-world cases.



BSA students take academic courses through North Hunterdon High School, which offers a wide range of coursework in their program of studies, including many Honors and AP options.

The BSA program of study also includes structured learning experiences and partnerships with multiple colleges and universities, including Rutgers University School of Health Professions and Raritan Valley Community College.





PROGRAMS

Grade 9: Principles of Biomedical Science

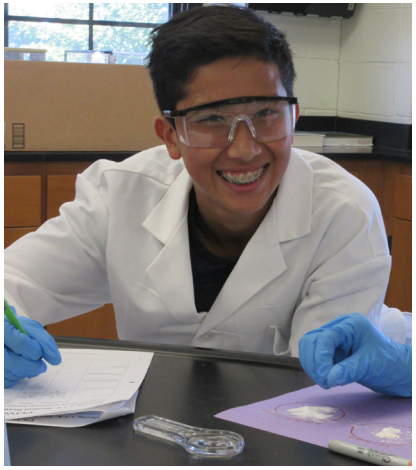
In the introductory course of the Biomedical Science program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.

Grade 10: Human Body Systems

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve real-world medical cases.

Grade 11: Medical Interventions

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.



Grade 12: Biomedical Innovation and Capstone

In the final course of the Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.