

2017

Excellence in Action Award

Bergen County Technical Schools, Teterboro High School

Culinary Science/Culinology®

Agriculture, Food & Natural Resources Career Cluster

OVERVIEW

Developed through a partnership between Bergen County Technical Schools, Rutgers University and the Research Chefs Association, the Teterboro High School Culinology® program of study in Paramus, New Jersey blends the science and technology of food production and preservation research with the culinary arts. The program of study, which began operation in 2012 as the first Culinology® program in the country, prepares students to master college-level science and technology coursework.

The program delivers a curriculum that includes AP and college-credit courses; rigorous academic and occupational skill requirements in agriculture, mathematics, humanities, culinary arts, and sciences; and an emphasis of critical analysis, problem-solving and employability skills. The program also includes a focus on key industry certifications needed to support success in the workplace.

Student Demographics (81 students)	Percentage
Male	20%
Female	80%
Low-Income	16%
Minority	52%

WORK-BASED LEARNING IN A GROWING INDUSTRY

There are nearly 400 food processing companies and 5,000 food/beverage manufacturers and wholesalers in New Jersey and major employers such as Arizona Beverages and Goya are planning large-scale expansions. New Jersey-based food and beverage companies employ over 31,000 and generate \$50+ billion in sales annually. Industry expansion and technological advances create an ongoing demand for specialists who can contribute to the growth of this complex and increasingly sophisticated food supply system.

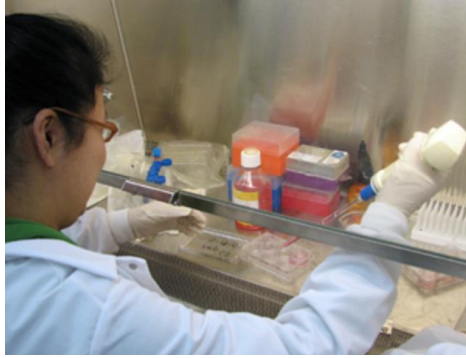
This allows Culinology® students to take advantage of this growing industry and experience a wide range of work-based learning opportunities, such as tours of business sites, demonstrations in industry and university laboratories, and designing and operating their own theme-based restaurants. Industry demonstrations also take place in the Culinology® test kitchen and laboratory, which mirror the workplace.

All seniors visit the PepsiCo headquarters, where they tour the

research and development laboratories, are exposed to the company’s strategy and vision, and use the company facilities to develop their own beverage product and concept and present it for review by PepsiCo executives.

Additionally, all seniors are paired with mentors and spend one full school day per week throughout the year in an internship working in a professional capacity in companies such as Nu Spice, Symrise, Hackensack University Medical Center, Liberty Science Center, St. Eve’s Restaurant and Rudy’s Inflight Catering. This “Senior Experience” familiarizes students with all aspects of the industry and with the culture of the worksite. Students are able to select their internships based on their specific areas of interest and participate in real-world projects that are guided by a trained industry mentor.

Culinology students take part in SkillsUSA and Health Occupations Students of America competitions, providing them with even more ways to gain leadership skills and confidence that they will be sure to use in the workplace.



ONE-OF-A-KIND RECIPE FOR SUCCESS

While Teterboro High School has had a Culinary Arts program for well over twenty years, in the past decade faculty started to see a slight change in their student profile. Increasingly, students were not only interested in culinary arts and the food industry, but were also drawn by a strong intrinsic interest in science. Increasingly, students demonstrated interest in going on to get a four-year degree as opposed to entering directly into the workforce.

Recognizing a need to modify the program to better match their student needs, Bergen County partnered with the Rutgers University's Departments of Biological Sciences and Food Science as well as the Research Chefs of America to develop a first-of-its-kind high school program blending the culinary arts and the science of food – Culinology®. All academic courses are delivered at the honors or AP level and students from the program now go on to some of the most prestigious four-year institutions in the nation.

PATHWAY TO POSTSECONDARY

The Culinology® program supports students in their postsecondary endeavors by offering 22 AP courses that can translate into college credits. In 2016, Culinology® students sat for 671 AP exams. Of those, 78 percent of students scored a 4 or 5, and the average score for all exams was a 4.

Students can also take dual enrollment courses provided through Syracuse University Project Advance and Fairleigh Dickinson University, and are also required to enroll in an articulated CTE course, which was developed jointly with Rutgers University. This articulated course is the only one of its kind at the high school level to be offered in partnership with Rutgers, testifying to the alignment of the Culinology® curriculum to postsecondary standards.

"The [program] goes above and beyond on a daily basis to provide a nurturing, educational, inspirational and transformational experience for their students." – Danielle Barbaro, Sr. Director Global Beverages Research & Development, PepsiCo

PARTNERS

American Cancer Society • Culinary Institute of America • Hackensack University Medical Center • Jenkins Culinary Resources • Johnson & Wales University • Liberty Science Center • Martini Grill • Miller's Bakery • NuSpice • PepsiCo • Research Chefs Association • Rudy's Inflight Catering • Rutgers University • Seowon (SW) Greenlife, Inc. • St. Eve's Restaurant • Sweet Grace Cake Design • Symrise

Success by the Numbers



100%

Participated in Work-based Learning



100%

Graduated High School



100%

Enrolled in Postsecondary Education



82%

Earned an Industry-recognized Credential



100%

Earned Postsecondary Credit

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