



BRISTOL COMMUNITY COLLEGE

BLUE CENTER FOR WATER TECHNOLOGIES

A MODEL HANDS-ON DRINKING WATER AND WASTEWATER OPERATOR TRAINING FACILITY.

ABOUT US

The Blue Center for Water Technologies was established under a Bristol Community College Presidential Fellowship in 2014 in response to the growing need for drinking water and wastewater industry technicians. During the fellowship a National Science Foundation (NSF) Advanced Technological Education (ATE) grant proposal was developed and submitted in the fall of 2015. In the spring of 2016, NSF ATE awarded BCC \$602,000¹ for the New England Water Treatment Training (NEWTT) project. It is designed to develop and/or enhance drinking water and wastewater education programs in community colleges throughout New England. Funding from this grant was used to enhance the Blue Center laboratory capabilities.

Serving as a model training center, the Blue Center features a functioning model conventional water treatment plant, a functioning wastewater treatment plant providing clean water for our aquaculture system, and a pond and groundwater monitoring well.

TRAINING FACILITY CAPABILITIES

- Surface water and groundwater sampling
- Solids testing
- BOD testing
- pH, conductivity, and ion testing
- Turbidity testing
- Groundwater simulators
- Pump operation and maintenance training
- Process control training
- Wastewater treatment plant operation simulation software
- Valve training
- Spectrophotometers
- Safety training
- General water science
- Pipe and metal box location
- Renewable energy training
- Top loading and analytical balances
- Jar testing
- Chlorine residual analysis
- Microscopic analysis

COLLABORATION & OUTREACH

The NEWTT grant, together with the Blue Center for Water Technologies, is working with representatives from the water industry, as well as academia and local and state governments, to develop curricula to meet the needs of the water industry. Our programs work to train students to be ready for municipal and privately operated facilities. We have an active internship program with these organizations and students participate in tours of their facilities.

We work with area high schools to bring students to the college for educational programs ranging from career days to 3-4 hour laboratory activities. Programs to educate the general public on water and wastewater issues are also provided.

EQUIPMENT LENDING LABORATORY

The Lending Laboratory at Bristol Community College was created under the NSF ATE grant, the Southeastern Massachusetts Retention and Achievement in Technology (SMART) project² and continued under the Sustainability and Green Energy (SAGE) project³.



The goal of the lab is to lend equipment to area high schools and colleges to expand the reach of the mission of the center. Under NEWTT, colleges may borrow equipment for a semester or more to help begin their programs and become familiar with the equipment.

Forms for loaning out the equipment are available at our website: sites.google.com/view/bccbluecenter

CONTACT INFORMATION

Robert S. Rak
Environmental Science and Technology Coordinator
774.357.2771 | Robert.Rak@BristolCC.edu

¹ NSF Grant Award #1601840; ² NSF Grant Award #0603390; ³ NSF Grant Award #1003418