BC3 students' inquisitiveness, imaginations on display in 3 events

April 26, 2019



Six Presidential Scholars who will graduate from Butler County Community College in May will present their findings in research projects during a public poster session from 6 p.m. to 8 p.m. May 6 in the upper lobby of the Heaton Family Learning Commons on BC3's main campus in Butler Township. BC3 Presidential Scholars in the Class of 2019 are shown April 22, 2019, on BC3's main campus. Front row, from left, Haley Vissari, of Renfrew; Kelly Kriley, of Butler; and Noah Pollock, of Chicora. Back row, from left, Claire Rodgers, of Saxonburg; Drew Meier, of Fenelton; and Meghan Hyatt, of Butler.

(Butler, PA) Butler County Community College will showcase the inquisitiveness of its STEM Division students, and of its Presidential Scholars, during upcoming poster presentations, and display the imaginations of those studying graphic design, photography, digital audio and video production and fine arts in a portfolio and art show.

Up to 50 students who this spring are enrolled in BC3's biology, geology, microbiology, physics and organic chemistry courses, and in a product realization capstone project, will exhibit their findings from research projects during BC3's STEM Division poster session.

The STEM Division poster session, scheduled for 12:45 p.m. to 2 p.m. Tuesday in the lobby of Succop Theater on BC3's main campus in Butler Township, will feature 21 posters, according to Dr. Melinda S. Ripper, who teaches organic chemistry at BC3 and who has coordinated the presentations since 2013.



Students in Butler County Community College's STEM Division will present their findings in research projects during a public poster session from 12:45 p.m. to 2 p.m. Tuesday in the lobby of Succop Theater on BC3's main campus in Butler Township. BC3 biology majors Jesse Peters, left, of Cabot, and Margaux Khosraviani, of Harmony, shown April 23, 2019, in a BC3 chemistry lab, were among the students who created a poster focusing on the antimicrobial behavior of essential oil extractions from plants.

BC3 students began work on their projects in March, Ripper said. They

will give five- to 10-minute presentations to the public on results of research into, among other topics, biodiesels, and the antimicrobial behavior of essential oil extractions from plants, which Ripper said, "is actually across two disciplines.

"We are blurring the borders between chemistry and biology and seeing how things work in the real world, where you don't have just chemistry and you don't have just biology, where you are using your knowledge from two fields to solve a problem."

The product realization capstone project involved the design of a new, innovative gripper for an industrial robot, said Michael C. Robinson, a BC3 assistant professor of STEM who this spring is teaching 3-D geometric modeling (Solidworks), manufacturing processes and materials, and automation and robotics.

"Unlike a typically mechanical gripper for robotic pick-and-place operations, this new design would be insensitive to the part size, shape, orientation or surface condition," Robinson said. "Their gripper designs incorporate an emerging technology in soft robotics known as reversible jamming transition, in which a vacuum is drawn on a free-flowing granular material until it transitions to a solid form around the part – similar to a brick of vacuum-packed coffee."

Portfolio, art show reflects "professionalism"

BC3's Portfolio and Art Show 2019 is set for 6 p.m. to 8 p.m. May 3 at BC3 @ Cranberry, 250 Executive Drive, Cranberry Township.

Members of the public can view students' displays in the lobby and multi-purpose room of the newly renovated building, said Kristine Allen, a BC3 graphic design instructor for 21 years, and appreciate "the level of the professionalism that the students have, and the quality education that they receive."

Graphic design, photography and digital audio and video production students will display their works from using Adobe software programs such as Illustrator, Photoshop, InDesign, Dreamweaver and Premiere Pro.



Allison Jones, of Butler, a student in Butler County Community College's communications and graphic design programs, is shown April 24, 2019, at BC3 @ Cranberry in Cranberry Township, with her colored pencil drawings titled "Conan," on left, and "Morrissey." Jones' work will be included in BC3's Portfolio and Art Show 2019, scheduled for 6 p.m. to 8 p.m. May 3 at BC3 @ Cranberry, 250 Executive Drive, Cranberry Township.

Photography students will exhibit their black-and-white, and color, photographs on matted or framed prints, or in portfolios, Allen said.

Up to 100 employers whose focus is graphic design, or others who have an in-house art department and who seek to recruit adept visual communicators, have been invited to the portfolio and art show, Allen said.

BC3's award-winning art and literary magazine, FACETS, which features poetry, short stories, photography and graphic design from BC3 students, will be available at the portfolio and art show for \$7.

Presidential Scholars "truly know their topics"

BC3's Presidential Scholars' poster session, which is also open to the public, is planned for 6 p.m. to 8 p.m. May 6 in the upper lobby of the Heaton Family Learning Commons on BC3's main campus.

It will also include presentations from Meghan Hyatt, of Butler, who is studying mathematics; Kelly Kriley, of Butler, chemistry; Drew Meier, of Fenelton, electronics technology with CADD; Noah Pollock, of Chicora, business administration; Claire Rodgers, of Saxonburg, history; and Haley Vissari, of Renfrew, early childhood education (Pre K-4).

Each student plans to graduate from BC3 in May.

The Presidential Scholars program is in its third year at BC3. The full-tuition President's Scholarship is presented to students in the Top 10 percent of their graduating class and who have achieved at least a 3.5 grade-point average at any of Butler County's public high schools. A cyber school student counted in those public schools' graduating classes is also eligible. Students must also enroll at BC3 in the first semester following their high school graduation to be eligible for the scholarship, and are required to take Scholars-only courses and maintain at least a 3.5 GPA at BC3.

A presentation by Hyatt will focus on writing in mathematics; by Kriley, on the anti-vaccine movement and the MMR vaccine; by Meier, on applying machine learning to optimize electronic circuits; by Pollock, on modern marketing; by Rodgers, on analyzing the contemporary history of popular music; and by Vissari, on combating math anxiety in elementary school students.

"Their topics are diverse," said Amy Pignatore, BC3's dean of admissions and college registrar, and an adviser of the Presidential Scholars program. "It's amazing how much work they put into it. They truly know their topics. They did their research, worked with their mentors, and those who attend the presentations will appreciate what they have to say."