

**ACADEMICS**

# Gardner-Webb Begins New Bachelor of Science Degree in Biochemistry

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- ▲ Cailen Blaire, '20, gained skills as a Undergraduate Summer Research Scholar that helped her gain acceptance into dental school.

## Program will Prepare Students to Pursue Careers in the Medical Field and Biomedical Research

BOILING SPRINGS, N.C.—Gardner-Webb University offers a new undergraduate degree in biochemistry, beginning this fall. The Bachelor of Science program meets the needs of students who plan to pursue graduate degrees for health-related fields or biomedical research. Students could also go directly into jobs with chemical or pharmaceutical companies.

“The current pandemic has highlighted the importance of a highly-qualified workforce in the health fields,” noted Dr. Stefka Eddins, professor of chemistry. “Accordingly, a surge of student interest in these fields is expected.”

For example, the Association of American Medical Colleges projects that by 2032 the United States will experience a shortage of nearly 122,000 physicians. Additionally, biochemists will be needed in areas, such as clean energy, efficient food production, and environmental protection. Employment of biochemists and biophysicists is projected to grow 6 percent in the next seven years.

Eddins added that Gardner-Webb’s biochemistry degree is unique, because GWU’s biology and chemistry programs are housed in one department. A survey of universities in the region found that they offer biochemistry options either as distinct majors through a single department or as concentrations within the chemistry major. “We have an opportunity to offer a well-balanced program

of study that reflects the interdisciplinary nature of biochemistry,” she observed. “It also enables the University to compete for prospective students, especially those interested in a predominantly teaching, Christian institution of higher learning.”



The new biochemistry major builds on the biomedical concentration in the biology major and the pre-health professional concentration in the chemistry major currently offered by the Department of Natural Sciences. Cailen Blaire, '20, used her biology/biomedical science concentration major, along with a minor in chemistry, to gain admission to the University of Buffalo School of Dental Medicine in New York. She also conducted undergraduate research, which gave her experience using the instrumentation in the GWU chemistry lab, such as infrared spectroscopy, nuclear magnetic resonance spectroscopy and chromatography. “The (research) opportunity also provided me with an interesting and unique topic to talk about during my dental school interview,” Blaire noted. “Specifically, it allowed me to demonstrate how I applied what I learned in class to a real-world question about science.”

The biochemistry major requires 62 program hours, with an overall requirement of 120 hours to complete the Bachelor of Science degree. Requirements include a professional readiness component, and students will demonstrate an understanding of fundamental introductory principles in chemistry, biology, biochemistry, and molecular biology. Students will also be prepared to apply and critique the scientific method in primary research sources in the scientific literature and demonstrate the ability to communicate scientific information in written, oral, and visual formats.

**Learn more about the Department of Natural Sciences.**

*Located in the North Carolina foothills, Gardner-Webb University is a private, Christian, liberal arts university. Gardner-Webb emphasizes a strong student-centered experience and rigorous academics to prepare students to become effective leaders within the global community. Ignite your future at Gardner-Webb.edu.*

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