Objectives
The Department of Biology offers a program leading to the Bachelor of Science with a major in biochemistry. The biochemistry program provides students with a solid understanding of biochemical and molecular aspects of biological systems, and excellent training for skills and competencies necessary for a variety of career paths. New research space in the William F. Walsh Science Center and equipment for experimentations in biochemistry, cell biology and molecular biology provide opportunities for students to conduct innovative research during their junior and senior years. The final year of study includes independent laboratory research and students presenting their own research projects.

Advances in the area of biochemistry, molecular biology and the integration of informatics have led to the expansion of career opportunities in all biology-related areas, especially in biotechnology and pharmaceutical companies. The biochemistry program prepares students who have a strong science and mathematics background, and are interested in biomedical research, for professions in healthcare, pharmacy, forensic science, bioengineering and biotechnology.

Career Opportunities
With the multidisciplinary/interdisciplinary training and authentic research experience offered in the biochemistry program, students become and stay competitive when proceeding to graduate school, health professional school or teaching.

More than 90 percent of SBU biochemistry graduates advance to postgraduate study or careers related to biochemistry. Some career paths that former students have taken and shown success in areas such as the M.D.+Ph. D. program at SUNY Upstate, the Ph. D. programs at John Hopkins University and University at Buffalo, the M. D. program at George Washington University, the Pharm. D. program at St. John Fisher College, and research lab at Catalent Pharma Solution.

Curriculum
• The B.S. in Biochemistry offers all coursework commonly required in the field of biochemistry. In addition, students have the flexibility to pursue their passion in biology, chemistry and/or mathematics by taking a suite of specialty courses as their Natural Science Electives.

• Classes are small (averaging approximately 20 students), and laboratory sections in upper-level courses are taught by the same faculty who teach the lecture sections, in keeping with the university's commitment to personalized education.

• All biochemistry majors conduct mentored independent research projects in their senior year, working with individual faculty researchers.
• In the senior-year biochemistry seminar, students explore current trends in the field through discussion of recent research articles and presentation of their own research projects.

Research Opportunities

Dr. Arnold T. Borer Summer Research Program
The Department of Biology offers summer research opportunities in the areas of cellular and molecular biology. This program, supported by the Dr. Arnold T. Borer Summer Research Endowment, provides selected students with a stipend, free room and board, and a travel allowance.

John L. & Léone E. Worden Memorial Award
John Worden earned a Ph.D. in physiology from St. Bonaventure University and taught here from 1933-1973, serving as Professor of Biology for most of that time. He was also chair of the department from 1937-1947 and acting dean of the graduate school from 1943-1945. This award itself is a distinction, as only the top juniors in the Biology and Biochemistry programs are invited to submit an application. One Worden Award of $1200 is given each year to support a mentored research project in the senior year.

What students say about our Biochemistry Program

“As a student in the Biochemistry program at St. Bonaventure I was challenged and guided by great mentors that showed me that my efforts could lead to a rewarding scientific career. Throughout my undergraduate career the professors continued to amaze me with the workings of biological systems.

“This program allowed me to have countless hands on experiences with class labs and research, allowing me to grasp what a graduate and research career will entail. I was able to design some of my own experiments and present my findings at conferences. I was also able to conduct research in labs at other universities.”

— Sarah Metcalf, Class of 2016
PhD candidate, PhD Program in Biomedical Sciences (PPBS), University of Buffalo

“The biochemistry program at St. Bonaventure is fantastic! It provided me with the opportunity to participate in scientific research that prepared me for my professional career.

“The requirement to enroll in courses that challenged me to critically think as a scientist is an invaluable experience that will stick with me for years to come... let alone the arsenal of understanding and caring professors who pointed me in the right direction!”

— Rory Jones, Class of 2014
Lab Associate, Catalent Pharma Solutions