Biochemistry Program Mission

The biochemistry program operates under the auspices of the Department of Chemistry and Physics at Armstrong State University. The program is committed to developing a bachelor’s degree program acknowledged and recognized around the southeast region of the United States for excellence and innovation in its curriculum, undergraduate research and graduates. The faculty are committed to exceptional teaching and undergraduate research experiences for our students to enhance the vitality of our program.

Biochemistry Program Vision

The biochemistry program at Armstrong State University is committed to being recognized in the region as an outstanding program based on teaching excellence, curriculum innovation and high quality undergraduate research and experiential activities to enhance our graduates and regional reputation.

Biochemistry Program Objectives

1. Prepare students for bachelor’s level careers as well as graduate and professional school.
2. Provide high quality and innovative classroom experiences for our students through professional development and implementation of technologies throughout the curriculum as demonstrated by assessment activities.
3. Expose undergraduates high quality research through faculty / student mentoring experiences which result in peer reviewed outcomes.
4. Pursue external funding to support excellence in curriculum improvement and research activities.
5. Promote biochemistry through professional and community activities.
6. Provide excellent advising experiences to help guide students through the program and into their chosen profession.
7. Actively market the program and maintain strong alumni relations.

Biochemistry Program Goals (2016-2021)

1. Explore accreditation by the American Society of Biochemistry and Molecular Biology by 2020.
2. Enhance a sense of community within the program and more broadly within the department.
   a. Create a student society for leadership, networking and social advancement of students by 2017.
   b. Provide regular professional and career seminars for students through various activities.
3. Increase the profile of the program through marketing and outreach.
   a. Expanded biochemistry outreach activities to the southeast Georgia region by faculty and the student society.
   b. Maintain an updated alumni database with periodic communication via electronic methods.
c. Provide alumni, students and the public with an annual newsletter updating program, faculty, student and alumni activities.

d. Enhance web presence via the departmental website.

4. Increase the number of graduates of the program to 10 per year by AY 2017 and 15 by AY 2020.
5. Increase the number of declared majors in the program to 100 by AY 2017 and 150 by AY 2020.
6. Average 70th percentile nationally on the exit exam and internal assessment outcomes.
7. 80% of graduates will get into their “chosen” fields within two years.
8. 80% of students in the program will engage in high impact experiential activities during their time in the program.
   a. Faculty will engage in undergraduate research with peer evaluated outcomes so that two publications and two professional presentations by students are averaged on an annual basis.
9. Realize external funding related to the biochemistry program of $500,000 by 2020 to enhance curricular, research and experiential activities.
10. Maintain and expand instruments and technology so students will have a state of the art educational experience.

Student Learning Outcomes (SLO) - BS Biochemistry

(March 2015)

a) Students will demonstrate mastery in the core discipline of biochemistry. Assessment methods: Exit exam, ACS Exam in CHEM 3802 and Final Exams.

b) Students will demonstrate mastery of the use of modern instrumentation, safe execution of biochemical experiments, data collection and analysis of results.
   Assessment methods: Exit Interview, Laboratory Reports, Undergraduate Research (when appropriate).

c) Students will demonstrate effective scientific communications skills in both written and oral form.
   Assessment methods: BCHM 4501 Grading Rubric, In-Class Presentations and Laboratory Reports.