After Graduation

Students who are interested in careers in the health professions will have completed coursework that prepares them for entry into medical school, dental school, pharmacy school, and other allied health fields.

Students who are interested in graduate school may apply to programs with a focus on research or education. Graduate research programs may focus on cell biology, molecular biology, immunology, genetics, forensics, and many other related fields. Students interested in secondary education may enter a graduate program in secondary education.

For More Information

For additional information about the Biomedical Sciences Concentration, facilities, faculty, and course offerings, please contact:

Department of Biological and Environmental Sciences
213 McCall Hall (MSCX)
Troy, AL 36082
334/670-3401
biomedicalsciences@troy.edu
Biomedical Sciences Concentration

The Biomedical Sciences Concentration at TROY prepares students for careers in the health professions and biotechnology and is an integral part of the pre-professional program. Students who receive a bachelor’s degree at Troy in Biomedical Sciences Concentration are well prepared to enter graduate or professional school, begin careers as laboratory technicians, or seek employment in the biotechnology industry.

Overview of the Program

Students complete a wide variety of courses aimed at providing a thorough understanding of the development, structure, and organization of the cell are exposed to a wide variety of modern approaches to analyze genetic, molecular, and cellular events.

Specialized courses in Microbial Ecology, Applied Genetics, Biochemistry, and Immunology complement the offerings in Biomedical Sciences. The inclusion of lab-based investigations in these courses serves to enhance the students' exposure to state of the art approaches to solving complex problems in biological systems.

Biomedical Sciences Concentration Required Courses

- Cell Biology
- Molecular Biology
- Human Anatomy and Physiology I
- Human Anatomy and Physiology II

Electives

Select 16 hours from the following courses:
- Biochemistry
- Immunology
- Histology
- Toxicology
- Parasitology
- Applied Genetics
- Microbial Ecology

(All of the above courses require completion of a lecture and lab)

Undergraduate Research

Students are encouraged to gain research experience by participating in the research projects of the faculty. Available projects include investigations in microscopy, molecular taxonomy, lead toxicity, DNA replication and transcription, toxicity of hazardous waste, endocrine disruptors, bioinformatics, endocytosis and exocytosis, and ionoregulatory transport enzymes.

Educational Enrichment Opportunities

Students who choose the Biomedical Sciences Concentration will have many opportunities for growth outside the classroom.

Many research opportunities are available for students to conduct research with faculty mentors using current technology and equipment.

Additionally, students are encouraged to join the Department’s three student organizations, including:

- Beta Beta Beta (National Biological Honor Society),
- The Environmental Club,
- Alpha Epsilon Delta (Health Professions Honor Society).

Photos are from Biological Science students' samples.