Mission/Vision Statement

The Biology Department of Wilkes University offers students a comprehensive education in the biological sciences to enhance understanding of the living world and its relevance to the human condition, and to provide a foundation for career development in the life and health sciences. The Department emphasizes both the content and process of biology throughout its curricula by means of investigative learning, student-initiated research and close collaboration between students and a supportive faculty.

The Department’s vision is to gain a national reputation as a leading undergraduate program in the biological sciences.

Students/Customers

The Biology Program serves undergraduate students interested in degree programs leading to a Bachelor of Science in Biology, a Bachelor of Arts in Biology or a Bachelor of Science in Medical Technology.

Program Objectives (PO)

- Increase the number of students electing careers in science, especially biology, chemistry and related fields.
- Increase the number of students successfully attending and completing graduate programs in the sciences.
- Increase the number of students successfully completing MD or MD/PhD programs.

Student Learning Objectives (SLO)

- Appreciation that biology, like all sciences, involves both a factual body of knowledge and a process by which that knowledge is obtained and disseminated.
- Skill in defining a research question, experimental design with adequate attention to problem definition, controls, appropriate methods and statistical analysis, implementation of the experiment, data collection, and data interpretation.
- Proficiency in presentation of biological information through preparation of written reports and oral exposition.
- Facility with laboratory instrumentation and techniques used in life sciences research, including chromatography, spectrophotometry and electrophoresis.
- Knowledge of the structure of biological literature and proficiency with accessing information via modern bibliographic searching techniques.
- Understanding of structural and functional relationships in life forms as expressions of organic evolution, expressed as an ability to interpret natural phenomena in the context of natural selection.
- Awareness of genetics, anatomy, physiology, microbiology, botany, behavior, evolution, cell biology, metabolism, immunology, invertebrate biology, histology and ecology in an integrated fashion.
- Appreciation for the integration of biology with the other natural sciences and with disciplines outside of the sciences.
- An ethical perspective on concepts and developments emerging in a life sciences context.

Key Assessment Activities

- Traditional Grading
- Successful Participation in Senior Research and Senior Projects
- Howard Hughes Medical Institute (HHMI) Proposal Invitation
- MCAT Scores
- National Academy of Sciences 2010 Report
### University Strategic Plan Goals (SPG)
1. Achieving excellence & growth in academic programs.
2. Developing a world-class support environment.
3. Valuing our people.

### Institutional Student Learning Outcomes (ISLO)
Through coursework, learning experiences, co-curricular and extracurricular activities, students will develop and demonstrate:
1. Knowledge, skills, and scholarship appropriate to general and major field areas of study.
2. Effective written and oral communication skills and information literacy using an array of media and modalities.
3. Practical, critical, analytical, and quantitative reasoning skills.
4. Actions reflecting ethical reasoning, civic responsibility, environmental stewardship, and respect for diversity.
5. Interpersonal skills and knowledge of self as a learner that contribute to effective team work, mentoring, and life-long learning.

### Strategic Alignment

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Alignment w/SPG</th>
<th>Alignment w/ISLO</th>
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<tbody>
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**Classification of Instructional Program (CIP) Code : 26.0101**