

Biology, A.A.

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (<http://registrar.wvu.edu/gef/>)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102 or ENGL 103	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		31-37

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Curriculum Requirements

Code	Title	Hours
A GPA of 2.0 in Biology course work is required for graduation.		
GEF Requirements (4, 5, or 6)		6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research (GEF 1)	6
BIOL 115 & 115L	Principles of Biology and Principles of Biology Laboratory (GEF 2 - Minimum grade of C-)	4
BIOL 117 & 117L	Introductory Physiology and Introductory Physiology Laboratory (GEF 8 - Minimum grade of C-)	4
BIOL 219 & 219L	The Living Cell and The Living Cell Laboratory	4
BIOL 221	Ecology and Evolution	3
CHEM 115 & 115L	Fundamentals of Chemistry 1 and Fundamentals of Chemistry 1 Laboratory (GEF 8)	4
CHEM 116 & 116L	Fundamentals of Chemistry 2 and Fundamentals of Chemistry 2 Laboratory (GEF 8)	4
CHEM 233 & 233L	Organic Chemistry 1 and Organic Chemistry 1 Laboratory	4
CHEM 234 & 234L	Organic Chemistry 2 and Organic Chemistry 2 Laboratory	4
WVUE 191	First Year Seminar	1
MATH 150 or MATH 155	Applied Calculus (GEF 3) Calculus 1	3
Foreign Language (12 credit hours required)		12
Elective		1
Total Hours		60

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BIOL 115 & 115L (GEF 2)		4 ENGL 101 (GEF 1)	3
CHEM 115 & 115L (GEF 8)		4 BIOL 117 & 117L (GEF 8)	4
MATH 150 or 155 (GEF 3)		3 CHEM 116 & 116L (GEF 8)	4
WVUE 191		1 Foreign Language	3
Foreign Language		3 HLSC 270 (or Elective)	1
		15	15

Second Year

Fall	Hours	Spring	Hours
ENGL 102 (GEF 1)		3 BIOL 221	3
BIOL 219 & 219L		4 CHEM 234 & 234L	4
CHEM 233 & 233L		4 GEF Elective (4, 5, or 6)	3
Foreign Language or Elective		3 GEF Elective (4, 5, or 6)	3
		Foreign Language or Elective	3
		14	16

Total credit hours: 60

Major Learning Outcomes

BIOLOGY

Upon completion of the associates in biology program, students will be able to:

1. Explain how information is stored, processed and used within cells and organisms.
2. Analyze how organisms obtain and process energy and matter.
3. Explain the primary forces of evolution, including how these forces lead to genetic differentiation and speciation.
4. Describe how biological structures dictate their function.
5. Explain how organisms, populations, communities and ecosystems are structured and function.
6. Transfer into a bachelor degree program in biology.