



2024-2025

BIOLOGICAL SCIENCE GRADES 8-12 MAJOR, B.S.

Science & Health Department; Shaw School of Sciences

Asbury is well known for the quality of its education programs, and science teachers are in demand. The Science and Health Department offers majors leading to grades 8-12 certification in either Biology or Chemistry.

To graduate must complete all major requirements, foundational requirements, and additional electives needed for 124 hour minimum degree requirement. This program may require more than 124 credits for a degree due to specific requirements.

[Education majors must choose COM130 in the Foundations Communication pool due to state certification requirements.]

MAJOR REQUIREMENTS (88)

__ 3	BIO	201	General Biology I
__ 1	BIO	203	General Biology Lab I
__ 3	BIO	202	General Biology II
__ 1	BIO	204	General Biology Lab II
__ 3	BIO	322	Genetics
__ 2	BIO	341	Ethical Issues
__ 3	CHE	121	Gen College Chemistry I
__ 3	CHE	122	Gen College Chemistry II
__ 1	CHE	123	Gen College Chemistry Lab I
__ 1	CHE	124	Gen College Chemistry Lab II
__ 3	ED	263	Science Content (P-5)
__ 4	PHY	201	Intro Physics I __ Lab

Complete Education requirements:

__ 2	ED	200	Intro to Education
__ 2	ED	220	Tech for Education
__ 2	ED	230	Human Growth/Development
__ 1	ED	301	Guided Inquiry Clinical
__ 3	ED	320	Exceptional Learner
__ 3	ED	385	Read/Writ Across Curriculum
__ 1	ED	401	Open Inquiry Clinical
__ 3	ED	405	Learning/Perform & Assess
__ 3	ED	410	Classroom Management
__ 3	ED	420	Content Methods
__ 1	ED	424	Content Methods Lab
__ 3	ED	428	Intervention for Differentiation
__ 12	ED	499	Student Teaching

Choose one Environmental Biology:

__ 4	BIO	217+219	Environmental Sci
	BIO	221+223	Ecology

Satisfy math proficiency for major:

__ 0 Met by ACT/SAT score of 24/580

OR

If MATH ACT/SAT score is below 24/580-

Complete:

	MAT	111	College Algebra** (transfer only)
	MAT	112	Precalculus** (transfer only)
__ 3-4	MAT	180	Intro to Calculus __ Lab
	MAT	181	Calculus I __ Lab

**Please note that College Algebra and Precalculus do NOT satisfy the Foundational MAT course requirement.

Choose one Plant Biology:

	BIO	227+229	Aquatic/Wetland Biology
__ 4	BIO	272+274	Principles Plant Biology

Choose one Human Biology:

__ 4	BIO	211+213	Microbiology
	BIO	331+333	Human Anatomy

Choose 2 additional Biology electives not used above:

	BIO	211+213	Microbiology
	BIO	262	Human Physiology (3)
__ 3-4	BIO	280	Scientific/Medical Terminology (3)
__ 3-4	BIO	331+333	Human Anatomy
	BIO	352+354	Physiology
	BIO	372+374	Cell & Molecular Biology

PLUS FOUNDATIONAL REQUIREMENTS (43)

(4 hours Science satisfied by required major courses; Foreign Language not required for B.S. BIOE majors. Degree becomes B.A. with completion of Foreign Language.)

Plus electives if needed for the 124 hour degree requirement