



2019-2020

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

Science & Health Department; School of Science, Health & Mathematics

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.*

### MAJOR REQUIREMENTS (90)

__ 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
__ 1	BIO	399	Intro to Bio Research
__ 2	BIO	400	Senior Research
__ 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	ESC	150	Earth Science
__ 1	ESC	151	Earth Science Lab
__ 4	PHY	201	Intro Physics I      __ Lab

Choose one Environmental Biology:

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

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

Complete Education requirements:

__ 2	ED	200	Intro to Education
__ 1	ED	201	Struct Inquiry Clinical
__ 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
__ 2	ED	410	Classroom Management
__ 3	ED	420	Secondary/P-12 Methods
__ 2	ED	428	Intervention for Differentiation
__ 12	ED	499	Student Teaching

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)
__ 3-4	MAT	112	Precalculus** (transfer only)
	MAT	181	Calculus I      __ Lab

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

### **PLUS FOUNDATIONAL REQUIREMENTS (42)**

(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**