

Requirements for the Degree of Bachelor of Science Biology College of Arts and Sciences

	Required Hours and Grade Point Average	
Academic Year 2017-2018	Minimum Degree Hours	B.S. Biology Department of Natural Sciences

Please Note:

- 1. While substantial effort will be made to insure accuracy of the material stated herein, Middle Georgia State University reserves the right to change any provision listed in this program of study, including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students apprised of such changes. If these degree requirements diverges from or conflicts with University System of Georgia Board of Regents (BoR) policy, BoR policy will always take precedence.
- 2. The Biology program of study is heavily dependent on meeting *pre-requisites*. Many classes are in a sequence where certain courses must be successfully completed before starting the next class. Talk with an advisor about the course sequence by semester.
- 3. Students must satisfy course *pre-requisites* with a minimum grade of C.
- 4. Students should take 15 credits each semester to complete the degree in four years.
- 5. Courses marked with a double Asterisk (**) are the preferred courses.
- 6. AP¹, IB², CLEP³, and DSST⁴ credit is available for select courses in this major. See catalog for complete listing of credit by examination and required score. Consult with an academic advisor prior to taking a CLEP or DSST exam to make sure it will fit in the degree program. Additional directives: http://www.mga.edu/testing-services/.

Requirements				
Core Curriculum Requirements: 60 hours		Upper Division Requirements: 60 hours		
AREA A: Essential Skills 9 Hours AREA B: Institutional Options	ENGL 1101 - English Composition I ^{1,2,3} ENGL 1102 - English Composition II ^{1,2,3} Math Elective* Note: Courses required for Area A must be completed within the first 30 hours. Perspectives Elective*	 Upper Level Core: 22 Credit Hours BIOL 3104K - Cell Biology (4 hrs.) BIOL 3211K - Evolution (4 hrs.) BIOL 3310K - Biochemistry (4 hrs.) BIOL 3510K - Invertebrate Zoology (4 hrs.) OR BIOL 3520K - Vertebrate Zoology (4 hrs.) OR BIOL 3360K - Plant Biology (4 hrs.) BIOL 4110K - Genetics (4 hrs.) BIOL 4120 - Senior Seminar (4 hrs.) OR BIOL 4894 - Research (2 hrs.) 		
4 hours AREA C: Humanities Electives 6 Hours	Literature Elective * Area C Elective *	 Required Credit: 20 Credit Hours BIOL 4530K - Molecular Biology (4 hrs.) BIOL 3540K - Microbiology (4 hrs.) MATH 1251 - Calculus I* ^{2,3} (4 hrs.) 		
AREA D: Science, Math Technology 11 hours	Lab Science Elective I* Lab Science Elective II* Area D Elective*	*Note: If MATH 1251 is used in Area A then students should take MATH 2252¹ or a 4 hour 3000 – 4000 level courses with a BIOL prefix. • PHYS 1111K - Introductory Physics (4 hrs.)¹ • PHYS 1112K - Introductory Physics II (4 hrs.)¹		

AREA E: Social Sciences 12 hours	HIST 2111 ^{1,3} or HIST 2112 ^{1,3} - US History to/from 1865 POLS 1101 - American Government ¹ Area E Elective Area E Elective	Elective Requirements: 18 Credit Hours Select 18 hours from the following options: BIOL 3113 – Environmental Science (3 hrs.) BIOL 3115K - Parasitology (4 hrs.) BIOL 3130 – Ethical Issues in Science (3 hrs.)
AREA F: Major Field 18 hours	Major Field Courses Credit: 18 Hours BIOL 2107K: Principles of Biology I ¹ BIOL 2108K: Principles of Biology II ¹ SCIE 2998: Research Methods <i>OR</i> BIOL 2999: Directed Studies in Biology CHEM 2211K: Organic Chemistry I CHEM 2212K: Organic Chemistry II	BIOL 3350K – Ecology (4 hrs.) BIOL 3360K - Plant Biology (4 hrs.) BIOL 3510K - Invertebrate Zoology (4 hrs.) BIOL 3520K - Vertebrate Zoology (4 hrs.) BIOL 3710K - Animal Physiology (4 hrs.) BIOL 3666K – Entomology (4 hrs.) BIOL 4120 – Senior Seminar (2 hrs.) BIOL 4150 – Tropical Ecology Studies (4 hrs.) BIOL 4321 – Special Topics (2 – 4 hrs.) BIOL 4344K - Comparative Vertebrate Anatomy (4 hrs.) BIOL 4500 – Immunology (3 hrs.) BIOL 4667K – Histology (4 hrs.) BIOL 4450K – Mycology (4 hrs.) BIOL 4454K – Developmental Biology (4 hrs.) BIOL 4774 – Field Biology (4 hrs.) BIOL 4894 - Research (2 – 4 hrs.)

NOTES:

*For a complete list of approved electives in each category, please consult the MGA catalog.