

**BACHELOR OF SCIENCE OR ARTS IN BIOLOGY
WITH A GENETICS & GENOMICS EMPHASIS
STARTING FALL 2019**



IMPORTANT INFORMATION TO REMEMBER

Use this sheet and the Master List of Biology Courses with your Degree Audit to schedule your courses in a logical and functional sequence. **YOU** are responsible for ensuring that **ALL** requirements are met for the major **AND** that you have fulfilled **ALL** university requirements. Pay special attention when repeating courses and class time conflicts.

Students must complete a minimum of 40 upper division hours (3000+)

Students must complete a minimum of 72 Science hours

Students must complete a minimum of 36 Biology credit hours

Students must complete 21 Biology residency hours that must be taken at the U

REQUIRED SCIENCE CORE COURSES

COURSE	TITLE	CREDITS	SEMESTER
MATH 1170 OR MATH 1210	CALCULUS FOR BIOLOGISTS I OR CALCULUS I	4	
MATH 1180 OR MATH 1220	STATISTICS WITH CALCULUS FOR BIOLOGISTS OR CALCULUS II	4	
CHEM 1210	GENERAL CHEMISTRY I	4	
CHEM 1215	GENERAL CHEMISTRY LAB I	1	
CHEM 1220	GENERAL CHEMISTRY II	4	
CHEM 1225	GENERAL CHEMISTRY LAB II	1	
CHEM 2310	ORGANIC CHEMISTRY I	4	
PHYS 2010	GENERAL PHYSICS I	4	
PHYS 2020	GENERAL PHYSICS II	4	

REQUIRED FUNDAMENTAL BIOLOGY COURSES

COURSE	TITLE	CREDITS	SEMESTER
BIOL 1610	FUNDAMENTAL PRINCIPLES OF BIOLOGY I	4	
BIOL 1615	FUNDAMENTAL PRINCIPLES OF BIOLOGY LAB I	1	
BIOL 1620	FUNDAMENTAL PRINCIPLES OF BIOLOGY II	4	
BIOL 1625	FUNDAMENTAL PRINCIPLES OF BIOLOGY LAB II	1	

EMPHASIS CORE COURSES

COURSE	TITLE	CREDITS	SEMESTER
BIOL 2020 OR BIOL 2021	PRINCIPLES OF CELL BIOLOGY OR PRINCIPLES OF CELL SCIENCE	3 OR 4	
BIOL 2030	PRINCIPLES OF GENETICS	3	
BIOL 3510	BIOLOGICAL CHEMISTRY I	3	
BIOL 3410	ECOLOGY & EVOLUTION	3	

COMPLETE AT LEAST 2 EMPHASIS ELECTIVE COURSE

COURSE	TITLE	CREDITS	SEMESTER
BIOL 5120	GENE EXPRESSION	3	
BIOL 5140	GENOME BIOLOGY	3	
BIOL 5510	GENES, DEVELOPMENT, AND EVOLUTION	3	

COMPLETE AT LEAST 2 EMPHASIS ELECTIVE COURSES

COURSE	TITLE	CREDITS	SEMESTER
BIOL 3125	MOLECULAR TOOLS FOR EVOL & POP BIOLOGY	3 [L2]	
BIOL 3205	MICROBIOLOGY LAB	1 [L1]	
BIOL 3210	GENERAL & PATHOGENIC MICROBIOLOGY	3	
BIOL 3230	DEVELOPMENTAL BIOLOGY	3	
BIOL 3520	BIOLOGICAL CHEMISTRY II	3	
BIOL 3525	MOLECULAR BIOLOGY OF DNA LAB	3 [L2]	
BIOL 5210	CELL STRUCTURE & FUNCTION	3	
BIOL 5221	HUMAN EVOLUTIONARY GENETICS	4 [L1]	
BIOL 5255	PROKARYOTIC GENETICS	3 [L2]	
BIOL 5275	MICROBIAL DIVERSITY, GENOMICS & EVOLUTION	4 [L1]	
BIOL 5910	MATHEMATICAL MODELS IN BIOLOGY	3	

COMPLETE 2 5000-LEVEL BIOLOGY COURSES

COURSE	TITLE	CREDITS	SEMESTER
BIOL 5_____			
BIOL 5_____			

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**COMPLETE AT LEAST 2 ADDITIONAL BIOLOGY LAB COURSES
TOTALLING 3 LAB UNITS**

COURSE	TITLE	LAB UNITS	SEMESTER

**OTHER BIOLOGY COURSES NEEDED FOR THE REQUIRED 36 BIOLOGY HOURS
OR REQUIRED 72 SCIENCE HOURS**

COURSE	TITLE	CREDITS	SEMESTER

NOTES