

BACHELOR OF SCIENCE OR ARTS IN BIOLOGY
STARTING FALL 2024

IMPORTANT INFORMATION TO REMEMBER:

- Students **MUST** complete a minimum of 40 Upper Division Hours (3000+ level courses)
 Students **MUST** complete a minimum of 42 Biology credit hours
 Students **MUST** complete a minimum 16 Upper Division Biology Hours (3000+ level courses)
 Students **MUST** complete 21 Biology Residency Hours that **MUST** be taken at the U

SCIENCE CORE

COURSE	TITLE	CREDITS	SEMESTER
MATH 1170 OR MATH 1210	CALCULUS FOR BIOLOGIST I OR CALCULUS I	4	
MATH 1180 OR MATH 1220	STATS W/CALCULUS FOR BIOLOGIST II OR CALCULUS II	4	
CHEM 1210	GEN CHEMISTRY I	4	
CHEM 1215	GEN CHEMISTRY LAB I	1	
CHEM 1220	GEN CHEMISTRY II	4	
CHEM 1225	GEN CHEMISTRY LAB II	1	
CHEM 2310	ORGANIC CHEMISTRY I	4	
PHYS 2010	GENERAL PHYSICS I	4	
PHYS 2020	GENERAL PHYSICS II	4	

BIOLOGY CORE

COURSE	TITLE	CREDITS	SEMESTER
BIOL 1610	FUND. OF BIOLOGY I	4	
BIOL 1615	FUND. OF BIOLOGY LAB I	1	
BIOL 1620	FUND. OF BIOLOGY II	4	
BIOL 1625	FUND. OF BIOLOGY LAB II	1	
BIOL 2020 OR BIOL 2021	PRINC. OF CELL BIOLOGY OR PRINC. OF CELL SCIENCE (HONORS)	3 OR 4	
BIOL 2030	GENETICS	3	
BIOL 3410	ECOLOGY & EVOLUTION	3	
BIOL 3510	BIOLOGICAL CHEMISTRY	3	

COMPLETE 1 CELL & MOLECULAR ELECTIVE
COURSES CANNOT COUNT IN MULTIPLE SECTIONS

COURSE	TITLE	CREDITS	SEMESTER
BIOL 3150	GENOMICS & BIOINFORMATICS	3 [L1]	
BIOL 3210	GENERAL & PATHOGENIC MICROBIOLOGY	3	

BIOL 3240	INTRO TO CELLULAR NEUROBIOLOGY	3	
BIOL 3370	MICROBIAL BIOLOGY	3	
BIOL 3520	BIOLOGICAL CHEMISTRY II	3	
BIOL 3550 OR BIOL 3551	PHYSICAL PRINCIPLES IN BIOLOGY	3	
BIOL 5120	GENE EXPRESSION	3	
BIOL 5210	CELL STRUCTION & FUNCTION	3	
BIOL 5510	GENES, DEVELOPMENT, & EVOLUTION	3	
BIOL 5920	ADVANCED EUKARYOTIC GENETICS	3	

**COMPLETE 1 ECOLOGY, EVOLUTION, AND
ENVIRONMENTAL ELECTIVE**

COURSES CANNOT COUNT IN MULTIPLE SECTIONS

COURSE	TITLE	CREDITS	SEMESTER
BIOL 3150	GENOMICS & BIOINFORMATICS	3 [L1]	
BIOL 3310	COMP VERTEBRATE MORPHOLOGY	3	
BIOL 3320	COMP PHYSIOLOGY	3	
BIOL 3340	INTRO TO PLANT BIOLOGY	3	
BIOL 3380	EVOL & PHYSIOLOGY BASIS OF HEALTH	3	
BIOL 3430	ANIMAL BEHAVIOR	3	
BIOL 3460	GLOBAL ENVIRONMENTAL ISSUES	3	
BIOL 3470	CONSERVATION BIOLOGY	3	
BIOL 5221	HUMAN EVOLUTIONARY GENETICS	4 [L1]	
BIOL 5350	ORNITHOLOGY	3	
BIOL 5370	MAMMALOLOGY	3	
BIOL 5440	URBAN ECOLOGY	3	
BIOL 5460	PLANT ECOLOGY IN A CHANGING WORLD	3	

BIOL 5471	QUANTITATIVE MODELS IN EVOL ECOLOGY	3	
BIOL 5480	ENTOMOLOGY	3	
BIOL 5490	ECOSYSTEM ECOLOGY	3	
BIOL 5495	BIOPHYSICAL ECOLOGY	4 [L1]	
BIOL 5510	GENES, DEVELOPMENT, AND EVOLUTION	3	
BIOL 5570	ECOL & EVOL OF PARASITES & PATHOGENS	3	

COMPLETE 1 INTEGRATIVE ORGANISMAL ELECTIVE COURSES CANNOT COUNT IN MULTIPLE SECTIONS

COURSE	TITLE	CREDITS	SEMESTER
BIOL 3210	GENERAL AND PATHOGENIC MICROBIOLOGY	3	
BIOL 3310	COMP VERTEBRATE MORPHOLOGY	3	
BIOL 3320	COMP PHYSIOLOGY	3	
BIOL 3330	BEHAVIORAL NEUROBIOLOGY	3	
BIOL 3340	INTRO TO PLANT BIOLOGY	3	
BIOL 3350	PHYSIOLOGY OF PLANTS	3	
BIOL 3370	MICROBIAL BIOLOGY	3	
BIOL 5350	ORNITHOLOGY	3	
BIOL 5370	MAMMALOLOGY	4	
BIOL 5425	MYCOLOGY	4	
BIOL 5480	ENTOMOLOGY	3	
BIOL 5510	GENES, DEVELOPMENT, AND EVOLUTION	3	

COMPLETE 1 LAB ELECTIVE COURSE WILL ALSO COUNT IN THE ADDITIONAL BIOLOGY LAB SECTION

COURSE	TITLE	CREDITS	SEMESTER
BIOL 3125	MOLE TOOLS FOR EVOL & POP BIOLOGY	3 [L2]	
BIOL 3205	GENERAL MICROBIOLOGY LAB	1 [L1]	
BIOL 3315	COMP VERTEBRATE MORPH LAB	1 [L1]	
BIOL 3325	COMP PHYSIOLOGY LAB	3 [L2]	
BIOL 3485	CONSERVATION BIOLOGY FIELD LAB	1 [L1]	
BIOL 3515	BIOLOGICAL CHEMISTRY LAB	3 [L1]	
BIOL 3525	MOLECULAR BIOLOGY OF DNA LAB	3 [L2]	
BIOL 3665	FORM, FUNCTION, AND ADAPTATION OF ANIMALS	3 [L2]	
BIOL 5221	HUMAN EVOLUTIONARY GENETICS	4 [L1]	
BIOL 5255	PROKARYOTIC GENETICS	4 [L2]	

BIOL 5275	MICROBIAL DIVERSITY, GENOMICS & EVOLUTION	4 [L2]	
BIOL 5355	ORNITHOLOGY LAB	1 [L1]	
BIOL 5425	MYCOLOGY	4 [L1]	
BIOL 5435	PLANT SYSTEMATICS	4 [L1]	
BIOL 5455	DESERT FIELD ECOLOGY	3 [L1]	
BIOL 5485	ENTOMOLOGY LAB	1 [L1]	
BIOL 5495	BIOPHYSICAL ECOLOGY	4 [L1]	
BIOL 5575	ECOL & EVOL OF PARASITES & PATHOGENS LAB	1 [L1]	
BIOL 5665	COMP PALEOBIOLOGY	3 [L1]	
CHEM 5750	ADV CHEMICAL BIO LAB	2 [L1]	

THE FOLLOWING COURSES CAN COUNT IN BOTH LECTURE AND LAB ELECTIVES: BIOL 5221, 5425, 5495

COMPLETE 2 5000-LEVEL BIOLOGY COURSES NEEDS TO BE AT LEAST 2 CREDIT HOURS

COURSE	TITLE	CREDITS	SEMESTER

COMPLETE AT LEAST 2 ADDITIONAL BIOLOGY LAB COURSES TOTTALLING 3 LAB UNITS

COURSE	TITLE	LAB UNITS	SEMESTER

OTHER BIOLOGY COURSES NEEDED FOR THE REQUIRED 42 BIOLOGY HOURS

COURSE	TITLE	CREDITS	SEMESTER