

## Biology (BA) (BS)

**Department:** [Biology](#)

**Type:** Major

### Basic Biology Core (BA)

Required of all Biology majors pursuing a Bachelor of Arts degree.

Item #	Title	Credits
BIOL 111	PRINCIPLES OF BIOLOGY (N)	4
BIOL 112	DIVERSITY OF LIFE (N)	4
BIOL 222	GENETICS	4
BIOL 224	CELL BIOLOGY	4
BIOL 245	ECOLOGY (Q)	4
	BIOL 253 OR BIOL 257	4
BIOL 381	JUNIOR SEMINAR (R)	3
BIOL 400	SENIOR SEMINAR (M)	1
	BIOL 401 or BIOL 402	2
CHEM 121	GENERAL CHEMISTRY I (NQ)	4
CHEM 122	GENERAL CHEMISTRY II (Q)	4

### Basic Biology Core (BS)

Required of all Biology majors pursuing a Bachelor of Science.

Item #	Title	Credits
BIOL 111	PRINCIPLES OF BIOLOGY (N)	4
BIOL 112	DIVERSITY OF LIFE (N)	4
BIOL 222	GENETICS	4
BIOL 224	CELL BIOLOGY	4
BIOL 245	ECOLOGY (Q)	4
	BIOL 253 OR BIOL 257	4
BIOL 381	JUNIOR SEMINAR (R)	3
BIOL 400	SENIOR SEMINAR (M)	1
BIOL 401	SENIOR RESEARCH (M)	2
CHEM 121	GENERAL CHEMISTRY I (NQ)	4
CHEM 122	GENERAL CHEMISTRY II (Q)	4
MATH 211	INTRO CALC/ANALYTIC GEOMETRY I (Q)	4
MATH 212	INTRO CALC/ANALYTIC GEOMETRY II (Q)	4
	Statistics or MATH 200-300 level course	3-4

## In addition to BA or BS core, select elective courses totaling at least 10 credits.

BA: Select two BIOL electives at the 200 level or above and one BIOL elective at the 300 level.

BS: Select one BIOL elective at the 200 level or above and two BIOL electives at the 300 level.

Item #	Title	Credits
BIOL 230	STUDIES IN BIOLOGY	3
BIOL 241	FIELD BIOLOGY	4
BIOL 248	CONSERVATION BIOLOGY	3
BIOL 250	NEOTROPICAL ORNITHOLOGY (I)	4
BIOL 255	MICROBIOLOGY	4
BIOL 261	EPIDEMIOLOGY (Q)	3
BIOL 264	HUMAN ANATOMY AND PHYSIOLOGY I	3
BIOL 265	HUMAN ANATOMY & PHYSIOLOGY II	3
BIOL 277	COLL:	3
BIOL 287	DEPARTMENTAL EXTERNSHIP	3
BIOL 305	BEHAVIORAL NEUROSCIENCE	3
BIOL 322	CANCER BIOLOGY	4
BIOL 324	REG FOR CHEM 324: BIOCHEMISTRY I	3
BIOL 325	BIOCHEMISTRY II	4
BIOL 327	IMMUNOLOGY	3
BIOL 328	BIOTECHNOLOGY	3
BIOL 348	CONSERVATION BIOLOGY	3
BIOL 351	EXERCISE PHYSIOLOGY (W)	4
BIOL 352	DEVELOPMENTAL BIOLOGY	4
BIOL 356	Biology of Insects	3
BIOL 361	ANIMAL BEHAVIOR (W)	4
BIOL 377	COLLOQUIUM	3
BIOL 380	TEACHING ASSISTANT FOR	3
BIOL 387	DEPARTMENTAL EXTERNSHIP	0
BIOL 383	ADVANCED STUDIES IN BIOLOGY	2

## Biomedical Science Emphasis

The biomedical science emphasis is an interdisciplinary program designed to prepare students for admission to professional schools in the medical sciences, graduate study in fields related to basic science research, or employment in the rapidly growing biotechnology and pharmaceutical industries.

Students are encouraged to pursue internships in the biomedical sciences (BIOL 387).

### Select four of the following:

Item #	Title	Credits
CHEM 221	ORGANIC CHEMISTRY I	4
CHEM 222	ORGANIC CHEMISTRY II (R)	4
CHEM 324	BIOCHEMISTRY I	3
CHEM 325	BIOCHEMISTRY II	4
PHYS 201	GENERAL PHYSICS I (NQ)	4
PHYS 202	GENERAL PHYSICS II	4
BIOL 255	MICROBIOLOGY	4
BIOL 261	EPIDEMIOLOGY (Q)	3
BIOL 264	HUMAN ANATOMY AND PHYSIOLOGY I	3
BIOL 265	HUMAN ANATOMY & PHYSIOLOGY II	3
BIOL 322	CANCER BIOLOGY	4
BIOL 327	IMMUNOLOGY	3
BIOL 328	BIOTECHNOLOGY	3
BIOL 352	DEVELOPMENTAL BIOLOGY	4

### Select one of the following:

Item #	Title	Credits
ANTH 208	MEDICAL ANTHROPOLOGY (I)	3
HCA 101	INTRO HEALTH CARE ADMINISTRATION	3
HCA 245	HEALTH CARE POLICY, POLITICS & LAW	3
HCA 250	GLOBAL HEALTH CARE (I)	3
PSYC 203	ABNORMAL PSYCHOLOGY (S)	3
PSYC 210	CHILD PSYCHOLOGY (S)	3
PSYC 211	ADOLESCENT PSYCHOLOGY (S)	3
PSYC 305	BEHAVIORAL NEUROSCIENCE	3
PSYC 307	DRUGS AND BEHAVIOR	3
SOC 260	MEDICAL SOCIOLOGY	3

## Science Education Emphasis

The science education emphasis, added to [a minor in education](#), prepares students for careers as science educators.

Students must fulfill requirements for the BA in Biology including both BIOL 253 and BIOL 257.

Students must also serve as a teaching assistant in a lab science.

Students also should refer to the requirement for an education minor and for teacher licensure.

### Select one of the following:

Item #	Title	Credits
BIOL 141	FIELD BIOLOGY (N)	4
BIOL 142	BOTANY IN THE FIELD (N)	4
	BIOL 148 AND BIOL 149	4
BIOL 150	FIELD ORNITHOLOGY (N)	4

### Select one of the following:

Item #	Title	Credits
BIOL 264	HUMAN ANATOMY AND PHYSIOLOGY I	3
BIOL 265	HUMAN ANATOMY & PHYSIOLOGY II	3
BIOL 380	TEACHING ASSISTANT FOR	3
<b>Total credits:</b>		<b>48-60</b>