

COLLEGE OF ARTS AND SCIENCES

Bachelor of Science in Biology

The curriculum leading to the Bachelor of Science degree with a major in biology is designed to prepare students for positions in industry, state and federal government, and to continue their education in professional and graduate schools. Successful students will be highly motivated for achievement in science and mathematics as well as achievement in the liberal arts. Careers in science range from agriculture to zoology and from teaching and research to medicine. Majors in biology are prepared to pursue graduate or professional study in such fields as physiology, genetics, botany, microbiology, biotechnology, molecular biology, medicine, veterinary medicine, dentistry, pharmacy, and many others.

Recommended 4-Year Curriculum

FRESHMAN YEAR

First Semester				Second Semester			
			Credit Hours				Credit Hours
ENGL	1301	Grammar & Composition I	3	ENGL	1302	Grammar & Composition II	3
BIOL	1306	General Biology I	3	BIOL	1307	General Biology II	3
BIOL	1106	General Biology I Lab	1	BIOL	1107	General Biology II Lab	1
CHEM	1311	General Chemistry I	3	CHEM	1312	General Chemistry II	3
CHEM	1111	General Chemistry I Lab	1	CHEM	1112	General Chemistry II Lab	1
UNIV	1300	Freshman Seminar	<u>3</u>			*Social Science	<u>3</u>
Total Semester Hours			14	Total Semester Hours			14

SOPHOMORE YEAR

First Semester				Second Semester			
			Credit Hours				Credit Hours
MATH	2413	Calculus I	4	MATH	2414	Calculus II	4
BIOL	_____	***Group I or II	3	BIOL	_____	Group I or II	3
BIOL	_____	***Group I or II Lab	1	BIOL	_____	Group I or II Lab	1
CHEM	3342	Organic Chemistry I	3	CHEM	3344	Organic Chemistry II	3
CHEM	3143	Organic Chemistry I Lab	1	CHEM	3145	Organic Chemistry II Lab	1
MATH	1342	Statistics or CHEM 3310/3111	<u>3-4</u>	ENGL	2322	or ENGL 2323 Literature	<u>3</u>
Total Semester Hours			15-16	Total Semester Hours			15

JUNIOR YEAR

First Semester				Second Semester			
			Credit Hours				Credit Hours
BIOL	3336	Ecology	3	CHEM	4334	Biochemistry	3
BIOL	3137	Ecology Lab	1	CHEM	4135	Biochemistry Lab	1
BIOL	3332	Genetics	3	BIOL	3334	Cell Biology	3
BIOL	3133	Genetics Lab	1	BIOL	3134	Cell Biology Lab	1
HIST	1301	U.S. History I	3	HIST	1302	U.S. History II	3
PHYS	2325	University Physics I	3	PHYS	2326	University Physics II	3
PHYS	2125	University Physics I Lab	<u>1</u>	PHYS	2126	University Physics II Lab	<u>1</u>
Total Semester Hours			15	Total Semester Hours			15

SENIOR YEAR

First Semester				Second Semester			
			Credit Hours				Credit Hours
BIOL	4114	Biological Seminar I	1	BIOL	4115	Biological Seminar II	1
BIOL	_____	***Group III	3	_____	_____	*Humanities Elective	3
BIOL	_____	***Group III Lab	1	_____	_____	**Laboratory Elective	4
BIOL	_____	***Group IV	3	BIOL	_____	***Group V	3
_____	_____	*Visual/Performing Arts	3	BIOL	_____	***Group V Lab	1
POLS	2305	American Government	3	POLS	2306	Texas Politics	3
_____	_____	Free Elective	<u>3-4</u>	_____	_____	Free Elective	<u>3</u>
Total Semester Hours			17-18	Total Semester Hours			18

Total hours must equal at least 124 hours

NOTES:

*See UT Tyler Core Curriculum for approved course(s).

**Approved electives are student's choice, limited only by the requirements to complete prerequisites and to obtain approval of student's advisor.

***At least one lecture and laboratory from each of the following groups is required.

Group I: Plant Morphology, Plant Taxonomy; Group II: Vertebrate Natural History, Entomology, Ornithology, Invertebrate Zoology, Herpetology; Group III: Microbiology, Cell and Molecular Biology; Group IV: Biogeography, Biological Evolution; Group V: Physiology, Comparative Vertebrate Biology.