

## COLLEGE OF ARTS AND SCIENCES

## Bachelor of Science in Biology: Life Science Teacher Certification Option

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. The Life Science Teacher Certification Option outlined below will prepare the student for a career in life science education.

## Recommended 4-Year Curriculum: Life Science Teacher Certification Option

## FRESHMAN YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
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
ENGL	1301	Grammar & Composition I	3	ENGL	1302	Grammar & Composition II	3
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
MATH	2413	Calculus I	4	MATH	2414	Calculus II	4
<b>Total Semester Hours</b>			<b>15</b>	<b>Total Semester Hours</b>			<b>15</b>

## SOPHOMORE YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
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
PHYS	2325	University Physics I	3	ENGL	2322	or ENGL 2323 Literature	3
PHYS	2125	University Physics I Lab	1	PHYS	2326	University Physics II	3
_____	_____	*Social Science	3	PHYS	2126	University Physics II Lab	1
<b>Total Semester Hours</b>			<b>15</b>	<b>Total Semester Hours</b>			<b>15</b>

## JUNIOR YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
BIOL	3336	Ecology	3	BIOL	3334	Cell Biology	3
BIOL	3137	Ecology Lab	1	BIOL	3134	Cell Biology	1
BIOL	3332	Genetics	3	_____	_____	*Visual/Performing Arts	3
BIOL	3133	Genetics Lab	1	HIST	1302	U.S. History II	3
HIST	1301	U.S. History I	3	EDSP	4350	Survey of Human Exceptionality	3
EDUC	3310	The School in the Social Setting	3	EDUC	4320	Teaching Skills	3
EDUC	3340	Educational Psychology	3	<b>Total Semester Hours</b>			<b>16</b>
<b>Total Semester Hours</b>			<b>17</b>	<b>Total Semester Hours</b>			<b>16</b>

## SENIOR YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
BIOL	4114	Biological Seminar I	1	BIOL	_____	**Group IV	3
BIOL	_____	**Group III	3	POLS	2306	Texas Politics	3
BIOL	_____	**Group III Lab	1	_____	_____	*Humanities	3
CHEM	4334	Biochemistry	3	EDUC	4057	Student Teaching Seminar	0
CHEM	4135	Biochemistry Lab	1	EDUC	4640	Student Teaching	6
POLS	2305	American Government	3	<b>Total Semester Hours</b>			<b>15</b>
EDFB	4338	Literacy in the Content Areas	3	<b>Total Semester Hours</b>			<b>15</b>
EDUC	4314	Teaching: Science	3	<b>Total Semester Hours</b>			<b>15</b>
<b>Total Semester Hours</b>			<b>18</b>	<b>Total Semester Hours</b>			<b>15</b>

Total hours must equal at least 126 hours

## NOTES:

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

\*\*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, Aquatic Biology; Group III: Microbiology, Cell and Molecular Biology, Physiology, Comparative Vertebrate Biology; Group IV: Biogeography, Biological Evolution.

## **Faculty**

Troy Anderson, Assistant Professor of Biology

B.S., M.S., Wichita State University; Ph. D., Kansas State University

Ali Azghani, Associate Professor of Biology

B.S., University of Tabriz; M.S., Ph. D. Texas Woman's University

Blake Bextine, Assistant Professor of Biology

B.A., University of Northern Iowa; M.S., Texas Tech University; Ph. D., Oklahoma State University

Cliff Boucher, Assistant Professor of Biology

B.S., Austin College; Ph. D., University of Michigan

Jessica Coleman, Lecturer in Biology

B.S., M.S., The University of Texas at Tyler

Neil B. Ford, Professor of Biology

B.S., University of Kansas; M.S., University of Oklahoma; Ph.D., Miami University

Suneeti Jog, Assistant Professor of Biology

B.S., M.Sc., University of Bombay, Ph.D. Cleveland State University

Don W. Killebrew, Chair and Professor of Biology

B.S., Lamar University; Ph.D., Texas A&M University

James F. Koukl, Associate Professor of Biology

B. S., Northern Illinois University, M.S., Ph.D., University of Missouri-Columbia

John S. Placyk, Assistant Professor of Biology

B. S., The Richard Stockton College of New Jersey; M. S., Northern Michigan University; Ph. D., University of Tennessee

Suzanne Pundt, Senior Lecturer in Biology

B. S. Texas A&M University, M.S. The University of Texas at Tyler

Lance R. Williams, Associate Professor of Biology

B. S., University of Oklahoma; M. S., Oklahoma State University; Ph. D., Mississippi State University

## **Corporations That Recruit Graduates from UT Tyler**

- The University of Texas Southwestern School of Medicine
- The University of Texas Medical Branch at Galveston
- The University of Texas Health Science Center at Tyler
- University of Michigan
- Baylor School of Medicine
- Tyler Independent School District

## **Student and Employer Comments**

"The biology department at UTT is one of the true gems in The University of Texas System and one of the best kept secrets in East Texas." Lynn McCutchen and Laney Mobley, 1996

"The course in Electron Microscopy was one of the most exciting and challenging courses that I experienced during my coursework at the University. It was personally rewarding for me." Katherine Patterson, 1997

"I appreciated the various applications of genetics to medicine ....I truly know that this experience has made me more prepared for future learning endeavors." Alfred D. Llave, 1999

"One of the best things about UT Tyler is the personal interest professors show in their students." Evan Howard, 2006