

BIOLOGY MAJOR, BACHELOR OF SCIENCE IN BIOLOGY (BS)

Required Biology Courses

BIOL 171	BIOLOGY I	5
BIOL 172	BIOLOGY II	5
BIOL 173	BIOLOGY III	5
BIOL 270	BIOLOGICAL INVESTIGATION	3
BIOL 310	FUNDAMENTALS OF GENETICS	5
BIOL 490	SENIOR CAPSTONE	5

Choose one of the following 5

BIOL 301	MICROBIOLOGY	
BIOL 302	BOTANY	
BIOL 303	INVERTEBRATE ZOOLOGY	
BIOL 304	VERTEBRATE ZOOLOGY	

Choose one of the following 4-5

BIOL 423	EVOLUTION	
BIOL 440	ECOLOGY	

Choose one of the following 5

BIOL 436	CELL BIOLOGY	
BIOL 438	MOLECULAR BIOLOGY	

Choose one of the following 4-5

BIOL 334	HUMAN ANATOMY AND PHYSIOLOGY III	
BIOL 351	PRINCIPLES OF ANIMAL PHYSIOLOGY	
BIOL 352	PRINCIPLES OF PLANT PHYSIOLOGY	
BIOL 353	PRINCIPLES OF MICROBIAL PHYSIOLOGY	

Required Supporting Courses

BIOL 380	DATA ANALYSIS FOR BIOLOGISTS	5
or MATH 161	CALCULUS I	
or MATH 380	ELEMENTARY PROBABILITY AND STATISTICS	
CHEM 151	GENERAL CHEMISTRY	5
CHEM 152	GENERAL CHEMISTRY	5
CHEM 153	GENERAL CHEMISTRY	5

Electives—21 of 36 credits must be in Biology, non-Biology electives must be approved by faculty advisor. 36

Total Credits 102-104

For information on General Education, see Undergraduate Degree (<http://catalog.ewu.edu/archives/2016-2017/undergraduate-degree>).

Student Learning Outcomes—students will

- demonstrate knowledge of evolution, diversity of life, and form and function of living organisms;
- interpret observations through the creation, testing, analysis of hypotheses;
- design laboratory or field experiments;
- inspect data and apply basic statistics to their analysis and communication.
- Write reports and prepare and deliver oral reports that:
 1. demonstrate ability to use scientific journals, periodicals, and electronic media to access current biological information;

2. demonstrate ability to evaluate journal articles from the primary literature.