

Advisors: Dr. Jenifer Walke	
Required Biology Courses: 28 credits	
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 Department Senior Capstone	(5)
Select one of the following courses: 5 credits	
BIOL 301 Microbiology	(5)
BIOL 302 Botany	(5)
BIOL 303 Invertebrate Zoology	(5)
BIOL 304 Vertebrate Zoology	(5)
[NOTE: For admittance into a Pharmacy program, both BIOL 301	` '
recommended; one will count towards elective credit for Biology BS	
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Select <u>one</u> of the following courses: 4-5 credits	
BIOL 423 Evolution	(5)
BIOL 440 Ecology	(4)
Select one of the following courses: 5 credits	
BIOL 436 Cell Biology	(5)
BIOL 438 Molecular Biology	(5)
Select one of the following courses (4–5 credits)	
BIOL 334 Human Anatomy and Physiology III for Biology Majors	(5)
BIOL 351 Principles of Animal Physiology	(4)
BIOL 352 Principles of Plant Physiology	(4)
BIOL 353 Principles of Microbial Physiology	(4)
Required Supporting Courses: 20 credits	
CHEM 171 General Chemistry	(4)
CHEM 171 General Chemistry Lab	(4)
CHEM 1712 General Chemistry CHEM 172 General Chemistry	(1)
CHEM 172 General Chemistry Lab	(4)
CHEM 172E General Chemistry CHEM 173 General Chemistry	(1) (4)
CHEM 173 General Chemistry Lab	
MATH 161 Calculus I or MATH 380 Elementary Probability	(1)
and Statistics or BIOL 380 Data Analysis for Biologists	(5)
[NOTE: Many Pharmacy programs require both Calculus and Stat	* *
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BS Biology: Pre-Pharmacy

ELECTIVE COURSES: 36 credits (21 must be Biology electives) of upper division (300- or 400-level) courses with advisor's consent.

The following BIOLOGY courses (25 credits) are required for admission to many Pharmacy programs, and are highly recommended as electives in the BS in Biology major for students working toward careers in pharmacy

BIOL 332 Human Anatomy & Physiology I Biology Major	(5)
BIOL 333 Human Anatomy & Physiology II Biology Major	(5)
BIOL 334 Human Anatomy & Physiology III Biology Major	(5)
BIOL 430 Immunology	(5)
BIOL 301 OR BIOL 304	(5)

The following non-BIOLOGY courses are required for admission to many Pharmacy programs, and are highly recommended as electives in the BS in Biology major for students working toward careers in pharmacy (15 credits of these will count as electives towards the BS in Biology)

CHEM 351 Organic Chemistry	(4)
CHEM 352 Organic Chemistry	(4)
CHEM 353 Organic Chemistry	(3)
CHEM 372 Organic Chemistry Lab	(3)
CHEM 480 Biochemistry	(5)

Other Suggested Courses: 20 credits

To meet Washington State University's College of Pharmacy Pre-Pharmacy requirements, students are recommended to select the following courses that will also partially fulfill General Education Core Requirements (GECR) at EWU:

on Core Requirements (GECK) at EWO.	
Humanities and Fine Arts GECR (List 3):	
PHIL 210 Critical Thinking (5), or	
PHIL 211 Introduction to Philosophy (5), or	
PHIL 212 Introduction to Ethics	(5)
Social Sciences GECR (List 2):	
PSYC 100 General Psychology	(5)
Social Sciences GECR (List 1):	
ECON 200 Microeconomics	(5)

To meet with Washington State University's College of Pharmacy Pre-Pharmacy requirements, students are recommended to also take (does not fulfill a GECR requirement):

CMST 200 Introduction to Speech Communication (5)

For current information on admission requirements to specific Pharmacy programs throughout North America, consult the 'Pharmacy School Locator' maintained by the American Association of Colleges of Pharmacy at http://www.aacp.org/resources/student/Pages/SchoolLocator.aspx.

Biology ETS Field Exam required for graduation.

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