



FORT HAYS STATE UNIVERSITY

WERTH COLLEGE OF SCIENCE, TECHNOLOGY AND MATHEMATICS

Department of Biological Sciences

Forward thinking. World ready.

Bachelor of Science in Biology - Health Professions

1. Biology Core (16 hours) Credit Hours

Required:

BIOL 180/180L Principles of Biology/Lab [fall and spring]	4
BIOL 325/325L Genetics/Lab [fall and spring]	4

Take **two** of the following:

BIOL 250/250L Botany/Lab [fall and spring]	4
BIOL 260/260L Zoology/Lab [fall and spring]	4
BIOL 490/490L General Microbiology/Lab [fall and spring]	4

Total in the Core 16

2. Structure and Function Requirement (8 hours)

Take **two** of the following, at least one of which must be a physiology course:

BIOL 330/330L Plant Anatomy/Lab [spring only; even-numbered years]	4
BIOL 345/345L Human Anatomy/Lab [spring only]	4
BIOL 346/346L Human Physiology/Lab [fall only]	4
BIOL 450/450L Comparative Anatomy/Lab [fall only; odd-numbered years]	4
BIOL 495/495L Plant Physiology/Lab [spring only; odd-numbered years]	4

Total in Section 2..... 8

3. Additional Process Class (minimum 3 hours)

Take one of the following:

BIOL 395/395L Ecology [spring only]	4
BIOL 435 Cellular Biology [spring only]	3
BIOL 420 Evolution [fall only]	3

Total in Section 3..... 3

4. Additional Upper-Division Requirements (courses at or above the 300-level; variable, but at least 7 hours required*)

Take any of courses with "BIOL" prefix and 300 level or above from either the list below or courses listed above that were not used to meet the requirements for that section.

Additional courses should be selected in consultation with advisor.

BIOL 401 Virology [odd Sp]	3	BIOL 642/642L Parasitology [odd Sp]	4
BIOL 470/471 Problems in Biology [Fa, Sp]	1-4	BIOL 644/644L Embryology [even Fa]	4
BIOL 476 Internship in Biology [Fa, Sp]	1-3	BIOL 648 Immunology [Fa]	3
BIOL 482 Readings in Biology [Fa, Sp]	1-3	BIOL 665 Biodiversity and Conservation Biology [Sp]	3
BIOL 610/610L Taxonomy Flowering Plants [Fa]	4	BIOL 672/672L Statistical Applications [even Sp]	4
BIOL 619/619L Aquatic Ecology [odd Fa]	4	BIOL 675 Microbiology of the Pathogens [even Sp]	3
BIOL 620/620L Biostatistics [Fa]	4	(Additional upper-division courses from sections 1, 2, and	
BIOL 627 Behavioral Ecology [even Sp]	3	3 can count here)	

Total in Section 4..... minimum 7*

- *Number of courses selected from this section will vary depending on the cognates required by professional schools.
- *Earned credit hours in Cognates (Section 5) PLUS Additional Upper-Division Requirements (Section 4) must total at least 37 credit hours.

Total in the Major minimum 34*

5. Cognates - in consultation with advisor, depending on professional school requirements

Chemistry (minimum 15 hours, two required courses plus minimum one elective)

Required:

CHEM 120/120L University Chemistry I/Lab [<i>fall only</i>]	5
CHEM 122/122L University Chemistry II/Lab [<i>spring only</i>]	5

Organic chemistry elective (minimum 5 hours)

CHEM 304/304L Essentials of Organic Chemistry/Lab [<i>fall only</i>]	5
Or:	
CHEM 340/340L Organic Chemistry I/Lab [<i>fall only</i>]	5
CHEM 342/342L Organic Chemistry II/Lab [<i>spring only</i>]	5

Biochemistry elective (minimum 5 hours)

CHEM 360/360L Essentials of Biochemistry [<i>spring only</i>]	5
Or:	
CHEM 662/662L Biochemistry I/Lab [<i>fall only</i>]	5
CHEM 664/664L Biochemistry II/Lab [<i>spring only</i>]	5

Physics (10 hours)

Take:

PHYS 111/111L Physics I/Lab [<i>fall only</i>]	5
PHYS 112/112L Physics II/Lab [<i>spring only</i>]	5
Or:	
PHYS 211/211L Physics for Scientists and Engineers I/Lab [<i>fall and spring</i>]	5
PHYS 212/212L Physics for Scientists and Engineers II/Lab [<i>fall and spring</i>]	5

Mathematics (minimum 6 hours)

Take one course in Statistics:

MATH 250 Elements of Statistics [<i>fall and spring</i>]	3
Or:	
BIOL 620/620L Biostatistics/Lab [<i>fall only</i>]	4

Take one course in Quantitative Analysis:

MATH 331 Calculus Methods [<i>fall and spring</i>]	3
Or:	
MATH 122 Plane Trigonometry [<i>spring only</i>]	3

Total in Cognates minimum 31

Total of Cognates (Section 5) PLUS Additional Upper-Division Requirements (Section 4) minimum 38

Total of Major Plus Cognates..... 65

General Education	55	
Major	65	There can be up to 10 hrs of Gen Ed included

Total 120

Grand Total 120