

Fort Hays State University–Bachelor of Science in Biology–Health Professions (120 Credit Hours)

FALL 2023

General Education Program (34-35 Hours; starting Fall 2023)

| <u>Course No.</u> | <u>Course Title</u> | <u>Hrs.</u> | <u>Grade</u> |
|--|--------------------------------------|-------------|--------------|
| English (6 hours) | | | |
| ENG 101 | English Composition I | 3 | _____ |
| ENG 102 | English Composition II | 3 | _____ |
| Communication (3 hours) | | | |
| COMM 100 | Fundamentals of Oral Communication | 3 | _____ |
| Math and Stats (3 hours) | | | |
| MATH 105 | College Algebra with Review | 3 | _____ |
| MATH 110 | College Algebra | 3 | _____ |
| MATH 234 | Analytic Geometry and Calculus I | 3 | _____ |
| MATH 331 | Calculus Methods* | 3 | _____ |
| Arts and Humanities (6 hours; 2 areas recommended) | | | |
| Aesthetic | | | |
| ART 180 | Fundamentals and Appreciation of Art | 3 | _____ |
| ART 201 | Survey of Art History I | 3 | _____ |
| MUS 161 | Listening to Music | 3 | _____ |
| THTR 120 | Introduction to Theatre | 3 | _____ |
| Historical | | | |
| HIST 110 | World Civilization to 1500 | 3 | _____ |
| HIST 111 | Modern World Civilization | 3 | _____ |
| HIST 130 | United States History to 1877 | 3 | _____ |
| HIST 131 | United States History since 1877 | 3 | _____ |
| Philosophical | | | |
| PHIL 120 | Introduction to Philosophy | 3 | _____ |
| PHIL 170 | World Religions | 3 | _____ |
| PHIL 340 | Ethics | 3 | _____ |
| Natural and Physical Sciences (4 hours; 1 course w/Lab) | | | |
| BIOL 180 | Principles of Biology* | 3 | _____ |
| BIOL 180L | Principles of Biology Lab* | 1 | _____ |

| <u>Course No.</u> | <u>Course Title</u> | <u>Hrs.</u> | <u>Grade</u> |
|-------------------|---------------------|-------------|--------------|
|-------------------|---------------------|-------------|--------------|

Social and Behavioral Sciences (6 hours; 2 areas recommended)

Social Science Requirement (choose 1 course)

| | | | |
|----------|----------------------------------|---|-------|
| CRJ 360 | Social Justice Action and Policy | 3 | _____ |
| PSY 100 | General Psychology | 3 | _____ |
| SOC 140 | Understanding Society | 3 | _____ |
| SOC 310 | Gender and Society | 3 | _____ |
| LDRS 200 | Discovering Leadership | 3 | _____ |

Engaged Global Citizens Requirement (choose 1 course)

| | | | |
|----------|-----------------------------------|---|-------|
| GSCI 110 | World Geography | 3 | _____ |
| POLS 105 | Current Political Issues | 3 | _____ |
| SOC 333 | Global Forces in a Changing World | 3 | _____ |
| TECS 391 | Technology in Society | 3 | _____ |

Institutionally Designated Area (6 hours; 2 areas recommended)

Critical Thinking

| | | | |
|----------|-------------------|---|-------|
| PHIL 100 | Critical Thinking | 3 | _____ |
|----------|-------------------|---|-------|

Personal and Professional Development

| | | | |
|----------|--|---|-------|
| FIN 205 | Theory and Practice of Personal Finance | 3 | _____ |
| GSCI 240 | Introduction to Geographic Info Systems | 3 | _____ |
| HHP 200 | Personal Wellness | 3 | _____ |
| INF 101 | Introduction to Computer Information Systems | 3 | _____ |
| MIL 302 | Soldier Health and Fitness | 3 | _____ |

*Counts towards General Education and the Biology major.

Other courses may fulfill the requirements. The recommendations listed here are for Biology majors. Please check with your faculty mentor or professional advisor for other course options.

You must complete 120 credit hours to earn a bachelor's degree.

Fort Hays State University–Bachelor of Science in Biology–Health Professions (120 Credit Hours)

FALL 2023

1. Biology Core (16 Hours)

Required:

| | | | | |
|-----------------------------------|---------------------------|---|-------|-----|
| BIOL 180/180L* | Principles of Biology/Lab | 4 | _____ | F S |
| BIOL 325/325L | Genetics/Lab | 4 | _____ | F S |
| Take two of the following: | | | | |
| BIOL 250/250L | Botany/Lab | 4 | _____ | F S |
| BIOL 260/260L | Zoology/Lab | 4 | _____ | F S |
| BIOL 490/490L | General Microbiology/Lab | 4 | _____ | F S |

*Counts towards General Education and the Biology major.

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 | 4 | _____ | F |
| BIOL 345/345L | Human Anatomy/Lab | 4 | _____ | F S |
| BIOL 346/346L | Human Physiology/Lab | 4 | _____ | F S |
| BIOL 450/450L | Comparative Anatomy/Lab | 4 | _____ | F (odd) |
| BIOL 495/495L | Plant Physiology/Lab | 4 | _____ | S |

3. Additional Process Class (minimum 3 hours)

Take one of the following:

| | | | | |
|---------------|------------------|---|-------|---|
| BIOL 395/395L | Ecology | 4 | _____ | S |
| BIOL 435 | Cellular Biology | 3 | _____ | S |
| BIOL 420 | Evolution | 3 | _____ | F |

4. Upper-Division Requirements (11-28 hours)

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. Courses other than those listed may be available. Talk to your faculty mentor and academic advisor. The number of credit hours completed in this section, depends on the number of credit hours completed in sections 3, 6, and 7.

| | | | | |
|---------------|-------------------------------|-----|-------|----------|
| BIOL 401 | Virology | 3 | _____ | S (odd) |
| BIOL 470/471 | Problems in Biology | 1-4 | _____ | F S |
| BIOL 476 | Internship in Biology | 1-3 | _____ | F S |
| BIOL 482 | Readings in Biology | 1-3 | _____ | F S |
| BIOL 627 | Behavioral Ecology | 3 | _____ | S (even) |
| BIOL 642/642L | Parasitology | 3 | _____ | S (odd) |
| BIOL 644/644L | Embryology | 4 | _____ | F (even) |
| BIOL 648 | Immunology | 3 | _____ | F |
| BIOL 675 | Microbiology of the Pathogens | 3 | _____ | S (even) |

5. Discipline Writing Course Graduation Requirement (3 hours)

| | | | | |
|----------|--------------------------|---|-------|---|
| BIOL 442 | Scientific Communication | 3 | _____ | F |
|----------|--------------------------|---|-------|---|

6. Cognates- Chemistry & Physics (30-40 hours)

(In consultation with advisor/mentor, depending on professional school requirements.

Ask your advisor about a Chemistry minor.)

General Chemistry (10 hours)

| | | | | |
|---------------|------------------------------|---|-------|---|
| CHEM 120/120L | University Chemistry I/ Lab | 5 | _____ | F |
| CHEM 122/122L | University Chemistry II/ Lab | 5 | _____ | S |

Organic Chemistry elective (minimum 5 hours)

| | | | | |
|---------------|-------------------------------------|---|-------|---|
| CHEM 304/304L | Essentials of Organic Chemistry/Lab | 5 | _____ | F |
|---------------|-------------------------------------|---|-------|---|

Or:

| | | | | |
|---------------|--------------------------|---|-------|---|
| CHEM 340/340L | Organic Chemistry I/Lab | 5 | _____ | F |
| CHEM 342/342L | Organic Chemistry II/Lab | 5 | _____ | S |

Biochemistry elective (minimum 5 hours)

| | | | | |
|---------------|--------------------------------|---|-------|---|
| CHEM 360/360L | Essentials of Biochemistry/Lab | 5 | _____ | S |
|---------------|--------------------------------|---|-------|---|

Or:

| | | | | |
|---------------|---------------------|---|-------|---|
| CHEM 662/662L | Biochemistry I/ Lab | 5 | _____ | F |
| CHEM 664/664L | Biochemistry II/Lab | 5 | _____ | S |

Physics (10 hours)

Take:

| | | | | |
|---------------|----------------|---|-------|---|
| PHYS 111/111L | Physics I/Lab | 5 | _____ | F |
| PHYS 112/112L | Physics II/Lab | 5 | _____ | S |

OR:

| | | | | |
|---------------|----------------------------------|---|-------|-----|
| PHYS 211/211L | Physics for Sci and Engr. I/Lab | 5 | _____ | F S |
| PHYS 212/212L | Physics for Sci and Engr. II/Lab | 5 | _____ | F S |

7. Cognates - Mathematics (minimum 6 hours)

Take one course in Statistics:

| | | | | |
|----------|------------------------|---|-------|-----|
| MATH 250 | Elements of Statistics | 3 | _____ | F S |
|----------|------------------------|---|-------|-----|

OR:

| | | | | |
|---------------|-------------------|---|-------|---|
| BIOL 620/620L | Biostatistics/Lab | 4 | _____ | F |
|---------------|-------------------|---|-------|---|

Take one course in Quantitative Analysis:

| | | | | |
|----------|-------------------|---|-------|-----|
| MATH 331 | Calculus Methods* | 3 | _____ | F S |
|----------|-------------------|---|-------|-----|

OR:

| | | | | |
|----------|--------------------|---|-------|-----|
| MATH 122 | Plane Trigonometry | 3 | _____ | F S |
|----------|--------------------|---|-------|-----|

*Counts towards General Education and the Biology major.

F = Fall Offering, S = Spring Offering

YOU MUST COMPLETE 120 CREDIT HOURS TO EARN A BACHELOR’S DEGREE.