

# ***AS Applied Science – General Science Option***

## **PHILOSOPHY:**

The General Science program is designed to provide basic education in the sciences for those students who are planning on transferring to a four-year college or university. Students will acquire knowledge about the mathematical, physical, and biological nature of the universe. Native American ways of knowing will be integrated into the coursework.

## **EXPECTED LEARNER OUTCOMES:**

Students will:

1. Demonstrate basic comprehension of the foundations and principles of biology, chemistry, physics and mathematics.
2. Demonstrate an understanding of proper laboratory technique and research utilizing the scientific method and proper experimental design.
3. Demonstrate professional reading, writing and analysis skills.
4. Demonstrate knowledge of the relationship between the natural world and Native American cultures.

## **COURSE REQUIREMENTS:**

Students will complete the GENERAL EDUCATION and the PROFESSIONAL CORE degree requirements as outlined in the appropriate sections with these specific courses required for completion of General Education requirements:

<b>GENERAL EDUCATION</b>	
General Education Natural Sciences: BIOS 101: General Biology (4 credits)	<b>34 CREDITS</b>
General Education Social Sciences: PSYX 100: Intro to Psychology (3 credits)	
<b>PROFESSIONAL CORE</b>	
BIOS 290: Science Capstone (4 credits)	<b>31 CREDITS</b>
CHMY 141: General Chemistry I (3 credits)	
CHMY 142: General Chemistry I Lab (1 credit)	
PHSX205N: Fundamentals of Physics I (3 credits)	
PHSX 206N: Fundamentals of Physics I lab (1 credit)	
STAT 216: Intro to Statistics (3 credits)	
Electives* (16 credits)	
<b>TOTAL CREDIT REQUIREMENTS</b>	

\*Electives select from the following list of courses:

BIOH 101 Found of Human Biology (3 credits)  
 BIOH 102 Found of Human Biology Lab (1 credit)  
 BIOS 110: Intro to Zoology (4 credits)  
 BIOS 114: Intro to Botany (4 credits)  
 BIOS 200: General Ecology (4 credits)  
 BIOH 120: Elementary Microbiology (3 credits)  
 BIOH 121: Elementary Microbiology Lab (1 credit)  
 BIOH 201: Anatomy and Physiology I (3 credits)  
 BIOH 202: Anatomy and Physiology I Lab (1 credit)  
 BIOH 211: Anatomy and Physiology II (3 credits)  
 BIOH 212: Anatomy and Physiology II Lab (1 credit)

CHMY 143: General Chemistry II(3 credits)  
 CHMY 144: General Chemistry II Lab (1 credit)  
 CHMY 200: Biological Chemistry (4 credits)  
 ESCI 210: Intro to Soil Science (4 credits)  
 PHSX207N & 208N: Fundamentals of Physics II with Lab(4 credits)  
 M 171: Calculus I (5 credits)