# Career and Technical Education

Area of Study: Agriculture

Career Pathway: Animal Science & Systems

### Get the Facts:

The Animal Systems Pathway

encompasses the study of animal systems, including content areas such as life processes, health, nutrition, genetics, management and processing, as applied to small animals, aquaculture, exotic animals, livestock, dairy, horses and/or poultry

#### Workforce Trends:

Farmers and ranchers produce one-fourth of the world's beef and one-fifth of the world's grain, milk, and eggs here in the United States.

### Careers in Agriculture are:

• High demand/High skill/High wage

### Career Examples:

- Veterinarian
- Veterinary Assistant
- Livestock Producer
- Livestock Buyer
- USDA Inspector
- MDL Inspector
- Embryo Technologist
- Animal Nutrition

According to the Montana Department of Labor and Industry, the median hourly wage for occupations within Animal Systems is \$23.30.

# **Recommended Pathway Courses:**

Students may select individual courses for exploration or a complete Pathway for an in-depth focus.

- Foundation Courses (required)
- Introduction to Plant & Animal Science 1.0 credit
- Elective Courses 1.0 credit
- Applied Veterinary Science 1.0 credit
- · Horse & Companion Animal 1.0 credit
- Veterinary Assistant Certification 1.0 credit
- Agricultural Workplace Experience .50/1.0 credit
- College and Career Beyond High School:

There are many options for education and training beyond high school, depending on your career goals.

- Certificate
- Associate degree
- Bachelor's degree
- On-the-job training
- Apprenticeship

# MCPS Graduation Requirements-High School

- English/Language Arts 4.0 credits
- Mathematics 3.0 credits
- Social Studies 2.0 credits
- Science 2.0 credits
- Health Enhancement 2.0 credits
- Art 1.0 credit
- Career and Technical Education 1.0 credit

# Suggested High School Plan of Study

- 9th Grade
  - o English 9 1.0 credit
  - o Math 1.0 credit
  - o Social Studies .50/1.0 credit
  - o Earth Science 1.0 credit
  - o P.E/Health 1.0 credit
  - Art Courses 1.0 credit
  - o Intro to Plant & Animal 1.0 credit

#### 10th Grade

- English 10 1.0 credit
  - Math 1.0 credit
  - $\circ$  Social Studies .50/1.0 credit
  - o Biology 1.0 credit
  - o P.E./Health 1.0 credit
  - Art
  - o Pathway Elective .50 credit
  - o 11th Grade
  - o English 11 1.0 credit
  - o Math 1.0 credit

- o U.S. History 1.0 Credit
- Science Elective
- o P.E./Health Electives
- Art
- o Pathway Elective .50 credit
- 12<sup>th</sup> Grade
  - o English 12 1.0 credit
  - o Math 1.0 credit
  - o U.S. Government 1.0 credit
  - Science Elective
  - o P.E./Health Electives
  - Art
  - o Pathway Elective .50 credit

Work-Based Learning- Participation in a Pathway-related work-based learning experience Career and Technical Student Organization- National FFA Organization