## Career and Technical Education

Area of Study: Agriculture

Career Pathway: Agriculture, Food, and Natural Resources

### Get the Facts:

The AFNR Pathway encompasses the study of food safety and sanitation; nutrition, biology, microbiology, chemistry and human behavior in local and global food systems; food selection and processing for storage, distribution and consumption; and the historical and current development of the food industry."

#### 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:

- Geneticist
- Microbiologist
- Lab Technician
- Biochemist
- Animal Scientist
- Plant Scientist
- Food Scientist

According to the Montana Department of Labor and Industry, the median hourly wage for occupations within ANFR is \$36,140 per year.

# **Recommended Pathway Courses:**

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

Foundation Courses (required)

### **Elective Courses**

- Ag 2 1.0 credit
- Ag 3/4 1.0 credit
- Meat Processing 1.0 credit
- SAE/Record Keeping 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

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

#### 10th Grade

- English 10 1.0 credit
- Math 1.0 credit
- Social Studies .50/1.0 credit
- Biology 1.0 credit
- P.E./Health 1.0 credit
- Art

- English 11 1.0 credit
- Math 1.0 credit
- U.S. History 1.0 Credit
- Science Elective
- P.E./Health Electives
- Art
- Pathway Elective .50 credit

# 12<sup>th</sup> Grade

- English 12 1.0 credit
- Math 1.0 credit
- U.S. Government 1.0 credit
- Science Elective
- P.E./Health Electives
- Art
- Pathway Elective .50 credit

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