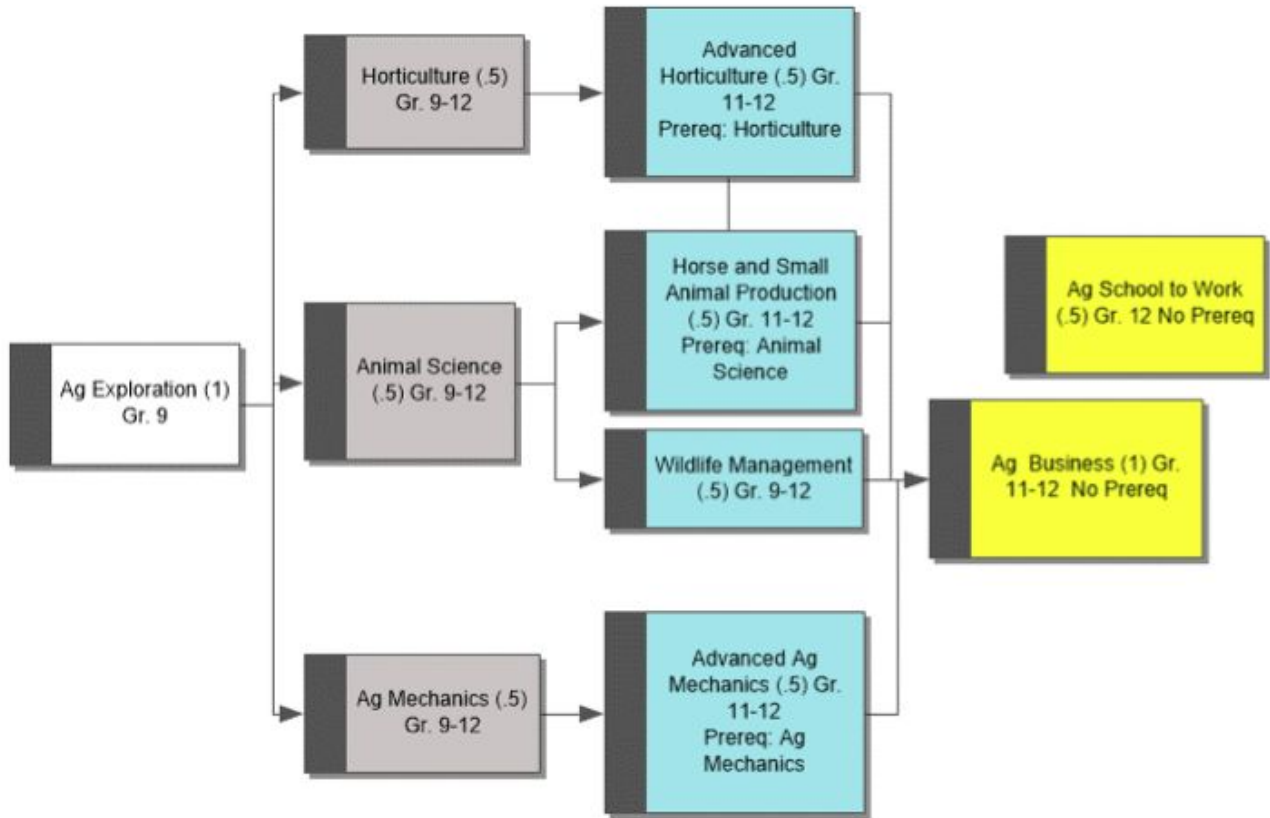


AGRI-SCIENCE-- CAREER/TECH



AGRI-SCIENCE-- CAREER/TECH

AGRICULTURAL EXPLORATION: - Semester-long Course

Course #: 0101 – 0102

Credit:2

Elective: Grades 9 - 11

Prerequisite: None

Course Description:

These un-sequenced semester-long courses are designed for students interested in exploring the seven career pathways in agriculture, learning about the FFA, and completing a Supervised Agricultural Experience Program. In the first semester, FFA, SAE, an overview of agriculture, and agriculture careers will be discussed. Second semester will be an in-depth look at each of the the seven career pathways in agriculture: Agri-Business Systems, Animal Systems, Environmental Service Systems, Food Products and Processing Systems, Natural Resources Systems, Plant Systems, and Power, Structural, and Technical Systems. Shop safety, wood projects, speakers, and movies are utilized.

Skills Needed To Be Successful In The Class:

Positive attitude, communication skills.

Specific Outcomes -- The Student Will Be Expected To:

1. Describe the seven areas of agriculture.
2. Define agriculture.
3. Keep accurate records for agricultural enterprises.
4. List and describe two careers in each agricultural area.

Careers Related to Content:

Agricultural Instructor, Farming, Ranching, Bio Processor, Conservationist

AGRI-SCIENCE-- CAREER/TECH

AG MECHANICS AND CONSTRUCTION: - Semester Course

Course #: 0151

Credit: 1

Elective: Grades 10 - 12

Prerequisite: None

Course Description:

Students will develop skills in identification and the use of hand and power tools, welding and ag carpentry. Electricity, concrete, structures and small gas engines will also be studied if time permits. Students will have an opportunity to construct projects that are required and some of their choice. Approximately 50% of the time will be spent in the shop working on projects.

Skills Needed To Be Successful In The Class:

Mechanical, positive attitude, carpentry.

Specific Outcomes -- The Student Will Be Expected To:

1. Identify and describe 25 major hand tools.
2. Identify and describe 15 major power tools.
3. Weld a butt, lap, tee and corner joints.
4. Complete 4 assigned projects (2 wood, 2 metal)

Careers Related to Content:

Implement Sales, Welder, Small Engine Mechanic, Implement Repair.

ADVANCED AG MECHANICS AND CONSTRUCTION: - Semester Course

Course #: 0152

Elective Credit: Grades 10-12 1

Elective: Grades 10 - 12

Prerequisite: Successful Completion of Ag Mechanics

Course Description:

This class will be a continuation of Ag Mechanics. Students will have the opportunity to complete six individual agriculturally related projects of their choice. 75% of the time will be spent in the shop working on projects.

Skills Needed To Be Successful In The Class:

Mechanical, positive attitude and carpentry.

Specific Outcomes -- The Student Will Be Expected To:

1. Describe the difference between hydraulics and pneumatics.
2. Describe a basic hydraulic system.
3. Describe robotics systems and how they are important to industry.
4. Complete an ag mechanics project approved by instructor.

Careers Related to Content:

Welder, Mechanic, Ag Engineer, Sales

AGRI-SCIENCE-- CAREER/TECH

ANIMAL SCIENCE: - Semester Course

Course #: 0113

Credit: 1

Elective: Grades 9 - 12

Prerequisite: None

Course Description:

This course will deal with beef, dairy, swine, sheep and goats. Topics covered will include identification, selection-evaluation, marketing, nutrition, reproduction, genetics, cell development and more.

Skills Needed To Be Successful In The Class:

Positive attitude math, desire for animal welfare (humane treatment).

Specific Outcomes -- The Student Will Be Expected To:

1. Identify, select and evaluate breeds of beef, swine, dairy, sheep and goats.
2. Balance a ration.
3. Identify and label reproduction systems of beef, swine, sheep and goats.
4. Describe basic genetics and cell development.
5. Explain how livestock was domesticated and arrived in North America.
6. Explain the difference between animal rights and animal welfare.

Careers Related to Content:

Veterinarian, Livestock Breeder, Geneticist, Livestock Buyer, Feed Salesman/Nutritionist, Agricultural Instructor.

AGRI-SCIENCE-- CAREER/TECH

HORSE/SMALL ANIMAL PRODUCTION: - Semester Course

Course #: 0123

Credit: 1

Elective: Grades 10 - 12

Prerequisite: None

Course Description:

Topics will include careers, care, management, marketing and sale of horses, small animals including rabbits, bees and pets. Field trips and guest speakers will be utilized as supplemental materials.

Skills Needed To Be Successful In The Class:

Positive attitude, communication skills, desire for animal welfare (humane treatment).

Specific Outcomes -- The Student Will Be Expected To:

1. Describe basic management practices for small animals.
2. Explain the development of the horse, identify 15 breeds and describe basic care.
3. Explain the development of the dog and identify 15 breeds.
4. Explain the development of the cat and identify 15 breeds.
5. Explain the difference between animal welfare and animal rights.

Careers Related to Content:

Veterinarian, Pet Store Supervisor, Small Animal Groomer, Kennel Supervisor.

WILDLIFE MANAGEMENT: - Semester Course

Course #: 0143

Credit: 1

Elective: Grades 9 - 12

Prerequisite: None

Course Description:

Topic area will center on the conservation and protection of the earth's resources. Subjects will include Wildlife Management, Water Quality, Air Quality and Soil Conservation.

Skills Needed To Be Successful In The Class:

Positive attitude, desire in environmental conservation, desire for animal welfare (humane treatment).

Specific Outcomes -- The Student Will Be Expected To:

1. Explain how wildlife management is important to wildlife species and humans.
2. Explain how resource conservation is important to present and future generations.

Careers Related to Content:

Wildlife Conservation Officer, Biologist, Park Supervisor, Environmental Engineer.

AGRI-SCIENCE-- CAREER/TECH

HORTICULTURE: - Semester Course

Course #: 0131

Credit: 1

Elective: Grades 9 - 12

Prerequisite: None

Course Description:

This course is designed for students interested in ornamental and/or landscaping plants. Areas to be studied will include landscape design, floral arrangements, pruning, plant identification and more.

Skills Needed To Be Successful In The Class:

Positive attitude, math, drawing and imagination.

Specific Outcomes -- The Student Will Be Expected To:

1. Layout and design landscaping projects.
2. Design and create a floral arrangement.
3. Identify and describe the major ornamental/landscaping plants.
4. List and describe five horticulture careers.

Careers Related to Content:

Greenhouse Manager, Nursery Manager, Landscape Architect, Golf Course Superintendent, Bio Technologist

ADVANCED HORTICULTURE: - Semester Course

Course #: 0132

Credit: 1

Elective: Grades 10 - 12

Prerequisite: Successful Completion of Horticulture

Course Description:

This course is designed for students interested in ornamental and/or landscaping plants as well as greenhouse production. Areas to be studied will include greenhouse production (includes working in a greenhouse), landscape projects, plants sales and much more.

Skills Need To Be Successful In The Class:

Strong interest in plants, positive attitude, creatively.

Specific Outcomes:

1. Propagate popular ornamental plant varieties.
2. Identify the major ornamental plants.
3. Germinate and transplant popular ornamental plants.
4. Complete a landscape project.

Careers Related to Content:

Agricultural Instructor, Greenhouse & Nursery Manager, Landscape Architect and Golf Course Superintendent.

AGRI-SCIENCE-- CAREER/TECH DEPT

AGRICULTURAL BUSINESS: - Full Year Course

Course #: 0161 – 0162

Elective Credit: Grade 11-12 2

Prerequisite: None

Course Description:

This course is designed for the agricultural student planning on post-secondary education and eventually a career in agriculture. Topics will include career exploration and college requirements, cash flows, marketing, Chicago Board of Trade, budgeting, and investments, speaking skills, record keeping and employment skills. Time will be allowed to create individual and group projects.

Skills Needed To Be Successful In The Class:

Positive attitude, communication skills and money management.

Specific Outcomes -- The Student Will Be Expected To:

1. Complete a 5-10 minute speech.
2. Keep accurate records (budgeting, enterprises, etc.).
3. Explain how the Chicago Board of Trade functions.
4. Explain how the Chicago Board of Trade is important to agriculture.
5. Complete a cover letter, resume' and references.
6. Complete a 500 – 1000 word essay on a specific facet in agriculture.

Careers Related to Content:

Commodity Broker, AG Sales, Farm Manager, Agriculture Instructor

