# Introduction to Agriculture Course No. 18001 Credit: 1.0

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| --- | --- | --- | --- |
| **Student name:**  |  | **Graduation Date:** |  |

Pathways and CIP Codes:Agribusiness Systems (01.0101); Comprehensive Agriculture Science (01.9999); Animal Science (01.0901); Biotechnology in Agriculture (26.1201); Food Products & Processing Systems (01.0401); Natural Resources & Environmental Systems (03.0101); Plant Systems (01.1101); Power, Structural & Technical Systems (01.0201)

Course Description: **Introductory Level:** Introduction to Agriculture courses survey a wide array of topics within the agricultural industry, exposing students to the many and varied types of agriculture and livestock career opportunities and to those in related fields (such as natural resources). These courses serve to introduce students to the agricultural field, providing them an opportunity to identify an area for continued study or to determine that their interest lies elsewhere. They often focus on developing communication skills, business principles, and leadership skills.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Concepts of Agriculture

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Analyze how the world population affects today’s agriculture industry |  |
| 1.2 | Identify significant historical developments in agriculture. |  |
| 1.3 | Examine important research achievements in agriscience and future research implications.  |  |
| 1.4 | Compare and contrast the methods of agriculture used in the local, county, state, nation, and world.  |  |
| 1.5 | Describe the importance of agriculture products in everyday life. |  |
| 1.6 | Discuss current agricultural events that impact the local community and state. |  |

## Benchmark 2: Careers in Agriculture

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | List the career pathways for agriculture, food and natural resources  |  |
| 2.2 | Research a potential agriculture career based on your interests |  |
| 2.3 | Develop a strategy to advance in that career.  |  |

## Benchmark 3: Leadership

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Define and identify characteristics of leadership  |  |
| 3.2 | Identify available leadership opportunities  |  |
| 3.3 | Differentiate between a group and a team  |  |
| 3.4 | Define teamwork and identify benefits to working in teams  |  |
| 3.5 | Understand and create personal goals using S.M.A.R.T. goals. |  |
| 3.6 | Describe the purpose and benefits of parliamentary procedure. |  |
| 3.7 | Demonstrate five parliamentary procedure motions. |  |

## Benchmark 4: Oral Communications

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 4.1 | Organize notes and ideas for formal, semiformal, and informal presentations. |  |
| 4.2 | Prepare and deliver a presentation appropriate to subject matter, purpose, and audience. |  |
| 4.3 | Use interviewing techniques to gather information |  |
| 4.4 | Participate in group communication activities. |  |
| 4.5 | Incorporate visual media into a presentation. |  |
| 4.6 | Give oral directions. |  |
| 4.7 | Demonstrate job interview skills. |  |

## Benchmark 5: Agribusiness Systems

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 5.1 | Compare the three segments of agribusiness |  |
| 5.2 | Identify examples of each segment and its role in the community |  |
| 5.3 | Define entrepreneurship |  |
| 5.4 | Identify methods of marketing |  |
| 5.5 | Graph an agricultural example of supply and demand |  |

## Benchmark 6: Plant Systems

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 6.1 | Identify and define the functions of vegetative and reproductive parts of plants. |  |
| 6.2 | Distinguish between sexual and asexual reproduction. |  |
| 6.3 | Compare and perform the primary methods of asexual reproduction in plants. |  |
| 6.4 | Identify the top five crops in your county and state. |  |
| 6.5 | Describe the requirements for plant growth. |  |
| 6.6 | Compare and contrast monocots and dicots. |  |
| 6.7 | Identify machinery used in forage, crop, horticulture, and landscape businesses. |  |

## Benchmark 7: Click or tap here to enter text.

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 7.1 | Define domestic animals. |  |
| 7.2 | Identify the basic needs and proper care of animals. |  |
| 7.3 | Discuss the purposes of livestock and companion animals. |  |
| 7.4 | Define and describe the difference between animal rights and animal welfare. |  |
| 7.5 | Compare animal digestive systems. |  |
| 7.6 | Identify and compare breeding management systems (reproduction). |  |
| 7.7 | Identify animal terminology. |  |
| 7.8 | Identify major breeds of livestock. |  |
| 7.9 | Identify types of companion animals. |  |
| 7.10 | Describe trends in the animal science industry. |  |
| 7.11 | Research an animal of your choice. |  |

## Benchmark 8: Power Structural & Technical Systems

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 8.1 | Research and identify components required in a health and safety performance plan. |  |
| 8.2 | Identify emergency response procedures for health and safety issues at AFNR workplaces. |  |
| 8.3 | Examine and categorize examples of how to avoid health and safety issues at AFNR workplaces. |  |
| 8.4 | Demonstrate safety practices in laboratory work. |  |
| 8.5 | Locate safety equipment and emergency exits in the agricultural mechanics laboratory. |  |
| 8.6 | Identify standard tools, equipment and safety procedures related to AFNR tasks. |  |
| 8.7 | Demonstrate proper safety techniques for using hand and power tools |  |

## Benchmark 9: Natural Resource Systems

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 9.1 | List and describe major kinds of natural resources. |  |
| 9.2 | Define sustainable resources. |  |
| 9.3 | Compare and contrast conservation and preservation. |  |
| 9.4 | List types of alternative fuels and explain why they are important. |  |
| 9.5 | Illustrate and describe the food chain. |  |
| 9.6 | Identify wildlife habitats for native Kansas animals. |  |
| 9.7 | Research an endangered species. |  |
| 9.8 | Identify the major components of soil. |  |

## Benchmark 10: Environmental Systems

### Competencies

| **#** | **Description** | **rating** |
| --- | --- | --- |
| 10.1 | Discuss major types and sources of pollution. |  |
| 10.2 | Develop a plan of action to improve the environment. |  |
| 10.3 | Illustrate the water cycle |  |
| 10.4 | Discuss global warming and the greenhouse effect. |  |
| 10.5 | Discuss alternative fuels and connection to agriculture. |  |

## Benchmark 11: Food Products & Processing Systems

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 11.1 | List the steps food must go through to from the producer to the consumer. |  |
| 11.2 | Identify food safety concerns. |  |
| 11.3 | Identify government agencies involved in food production. |  |
| 11.4 | Discuss biotechnology advancements currently in the food industry. |  |
| 11.5 | Discuss future developments predicted for the food industry. |  |

## Benchmark 12: Agricultural Issues

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 12.1 | Define agricultural industry terms (ex. Biotechnology, bio-terrorism, wind power). |  |
| 12.2 | Identify and describe a technological advancement that has happened in the last five years. |  |
| 12.3 | Research a current agriculture issue. |  |
| 12.4 | Discuss nutritional needs of humans and the food groups they need. |  |
| 12.5 | Cite important relationships between land characteristics and water quality. |  |

## Benchmark 13: Resource Management

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 13.1 | Locate information and select the materials, tools, and equipment needed to perform an activity or build a project. |  |
| 13.2 | Determine cost, time, and resources needed to complete a task within an industry or occupation. |  |
| 13.3 | Explain the relationship between setting goals and managing money. |  |
| 13.4 | Identify fixed a flexible expenses. |  |
| 13.5 | Identify planned and impulse buying. |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

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