Introduction to Agriscience / One Part

COURSE DESCRIPTION: In this course, students will learn more about the development and maintenance of agriculture, animal systems, natural resources, and other food sources. Students will also examine the relationship between agriculture and natural resources and the environment, health, politics, and world trade.

COURSE OBJECTIVES:

- Understand the importance of agriculture in history and define agriscience.
- Explain the significance of agriculture in American and state economies.
- Analyze the variables impacting imports and exports.
- Determine the relationship between agriculture and society at the local, state, national, and international levels.
- Evaluate the reliability of a website and recognize those that are appropriate for use in agriscience.
- Explain the relationship between agriscience and the environment.
- Identify threats to a healthy environment.
- Compare and contrast practices for conserving renewable and nonrenewable resources.
- Describe how natural resources are used in agriculture.
- Demonstrate effective communication skills.
- Identify the major parts of plants and state the important functions of each.
- Describe the relationships among air, soil, water, and essential plant nutrients.
- Compare the cell structure and function of plants, animals, bacteria, and viruses.
- Apply the different types of soil classification.
- Recognize and use critical-thinking skills.
- Understand and explain the evolution and roles of domesticated animals in society.
- Differentiate between domestication and natural selection.
- Defend various points of view regarding the use of animals.
- Determine the basic nutritional requirements of animals.
- Articulate the importance of ethics in the agriculture industry.
- Explore and discuss animal anatomy and systems.
- Comprehend and describe basic animal genetics.
- Identify the major pest groups and the importance of effective pest-management programs.
- Classify the nature of chemicals used to control pests.
- Demonstrate health and safety procedures, regulations, and personal-health practices.
- Describe efforts made to improve the environment.

- Analyze the effects of technology on agriculture.
- Communicate public concerns about technology and agriculture.
- Research the laws and regulations around biotechnology.
- Demonstrate appropriate professional behavior.
- Explore issues of global significance and document the impact of agriscience.
- Identify career opportunities in agriscience.
- Identify how careers are classified and determine preparation requirements.
- Identify personal aptitudes and skills needed for solid career planning.
- Develop a career plan that reflects career interests, pathways, and postsecondary options.
- Compare procedures for marketing plants and animal products.
- Define management terms and determine how decisions are made.
- Demonstrate entrepreneurship skills and knowledge of self-employment options and innovative ventures.
- Demonstrate respect for individual and cultural differences and recognize the importance of diversity in the workplace.
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PREREQUISITES: None

COURSE LENGTH: One Semester

REQUIRED TEXT: No required textbook for this course

MATERIALS LIST: No required materials for this course

COURSE OUTLINE:

Unit One: The Importance of Agriscience

Unit Two: Agriscience and the Environment

Unit Three: Plant Science

Unit Four: The Animal Element

Introduction to Agriscience Midterm Exam

Unit Five: Animal Anatomy

Unit Six: Technology and Agriscience

Unit Seven: Careers in Agriscience

Unit Eight: Agribusiness Management

Introduction to Agriscience Final Exam