

. Principles of Agriculture, Food, and Natural Resources

The student demonstrates professional standards/employability skills as required by business and industry

The student develops a supervised agriculture experience program.

The student analyzes concepts related to global diversity.

The student explains the historical, current, and future significance of the agriculture, food, and natural resources industry.

The student analyzes the structure of agriculture, food, and natural resources leadership in organizations.

The student demonstrates appropriate personal and communication skills.

The student applies appropriate research methods to agriculture, food, and natural resources topics.

The student applies problem-solving, mathematical, and organizational skills in order to maintain financial and logistical records.

The student develops technical knowledge and skills related to soil systems.

The student develops technical knowledge and skills related to plant systems.

The student develops technical knowledge and skills related to animal systems.

The student describes the principles of food products and processing systems.

The student safely performs basic power, structural, and technical system skills in agricultural applications.

The student explains the relationship between agriculture, food, and natural resources and the environment.

Wildlife, Fisheries, and Ecology Management

The student demonstrates professional standards/employability skills as required by business and industry.

The student develops a supervised agriculture experience program.

The student analyzes the importance of wildlife, with an emphasis on use and management.

The student knows the scientific basis of and applies concepts related to wildlife management.

The student knows the interrelationship between various aspects of wildlife and outdoor public use management.

The student examines natural cycles and ecological concepts.

The student applies cartographic skills to natural resource activities.

The student evaluates planning data by monitoring natural resource status.

The student analyzes various natural resource enhancement techniques using scientific knowledge.

The student demonstrates concepts related to optimum production.

Agricultural Mechanics and Metal Technologies

The student demonstrates professional standards/employability skills as required by business and industry.

The student develops a supervised agriculture experience program.

The student follows operating instructions for tools and equipment to perform a given task.

The student identifies and performs electric wiring skills.

The student performs plumbing skills.

The student performs concrete construction skills.

The student performs carpentry skills.

The student identifies fencing methods.

The student performs appropriate cold and hot metal techniques.

The student applies processes relating to assembly of equipment in agricultural systems operations.

The student plans and performs cost-effective construction techniques.

Agricultural Structures Design and Fabrication

The student develops a supervised agriculture experience program.

The student demonstrates principles of facilities design and fabrication related to agricultural structures.

The student explores the different types of power systems used in agricultural structures.

The student constructs agricultural structures using appropriate technology.

The student demonstrates metal construction techniques related to agricultural design and fabrication of structures.

Agricultural Equipment Design and Fabrication

The student demonstrates professional standards/employability skills as required by business and industry.

The student develops a supervised agriculture experience program.

The student demonstrates principles of design and fabrication related to agricultural machinery and equipment.

The student plans, constructs, and maintains fences, corrals, and other agricultural enclosures.

The student demonstrates construction techniques related to design and fabrication of agricultural equipment.

The student demonstrates knowledge of laws and regulations related to the construction, design and fabrication of agricultural equipment.