Principles of Agricultural Science – Plant Course Description

CASE

Principles of Agricultural Science – Plant (ASP) course provides a foundation of plant science knowledge and skills. Students will experience various plant science concepts through exciting "hands-on" activities, projects, and problems. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will learn how to apply scientific knowledge and skills to use plants effectively for agronomic, forestry, and horticultural industries. Students will discover the value of plant production and its impact on the individual, the local, and the global economy. Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers.

Students will understand specific connections between the course's lesson and Supervised Agricultural Experience and FFA components of agricultural education programs. Students will improve investigative, experimental and communication skills.

The ASP course is intended to build a foundation on the Introduction to Agriculture, Food and Natural Resources course. The course is structured to enable all students to have a variety of experiences that will provide an overview of the plant industries. To complete the Plant Program of Study, CASE offers specialization courses (Animal and Plant Biotechnology or Food Science and Safety) and the capstone course, Agricultural Research and Development. The knowledge and skills students develop will be used in the specialization and capstone courses within the CASE program.

The ASP course includes the following units of study:
- Worlds of Opportunity
- Mineral Soils
- Soilless Systems
- Anatomy and Physiology
- Taxonomy
- The Growing Environment
- Plant Reproduction
- Surviving a Harsh Environment
- Crop Production and Marketing