

CFISD Advanced Plant and Soil Science K

Scope and Sequence

Course Description:

Advanced Plant and Soil Science provides a way of learning about the natural world. Students should know how plant and soil science has influenced a vast body of knowledge, that there are still applications to be discovered, and that plant and soil science is the basis for many other fields of science. In this course, students will analyze such concepts as impact on production of food, fiber and other economic crops; factors within habitats and ecosystems; watershed, weathering, and erosion; along with origin and impact of fossil fuels and alternative energy sources.

- 1 credit, Grades 11-12
- Required prerequisite: Biology, Chemistry and Horticulture Science or Greenhouse Operation & Production
- **BASF Plant Science Certification satisfies the requirement to earn a performance acknowledgement.**
- Lab supplies or fee may be required.

TEKS

Program of Study: Plant Science

Cluster: Agriculture, Food, and Natural Resources

Endorsement: Business & Industry

- Meets advanced course requirement (Y/N): Y
- Meets foundation requirement for math, science, fine arts, English, LOTE (Y/N-area): Y - science

Industry Certification/Credentials: **BASF Plant Science Certification**

Instructional Units	Pacing
1 st Semester Intro to Plant Science Soil Properties & Quality Growing Media Hydroponics	1 st Grading Period
Cell Parts & Function Parts of Plants and Function Classification Systems Nomenclature	2 nd Grading Period
2 nd Semester Nutrients & Fertilizers Water, Light and Temperature Requirements Seed Anatomy & Germination Pollination and Fertilization	3 rd Grading Period
Asexual Propagation Methods Plant Adaptations Pests & Diseases Tools for Production BASF Plant Science Certification Structures & Equipment Marketing	4 th Grading Period

Primary Instructional Materials: ICEV Agricultural Science Site by CEV Multimedia Ltd.

Supplementary Instructional Materials: CASE Principles of Agricultural Science-Plant