

# CFISD Advanced Plant and Soil Science K

## Scope and Sequence

### Course Description:

This course is part of the Plant Science Program of Study and is designed to prepare 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. (Successfully completing Advanced Plant & Soil Science K satisfies a science credit requirement for graduation.)

- 1 credit, Grades 11-12
- Required prerequisites: Biology, Chemistry and Horticulture Science or Greenhouse Production
- Fees may be required

### TEKS

Cluster: Agriculture, Food, and Natural Resources

Endorsement: Business & Industry

Program of Study: Plant Science

- 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: n/a

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

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