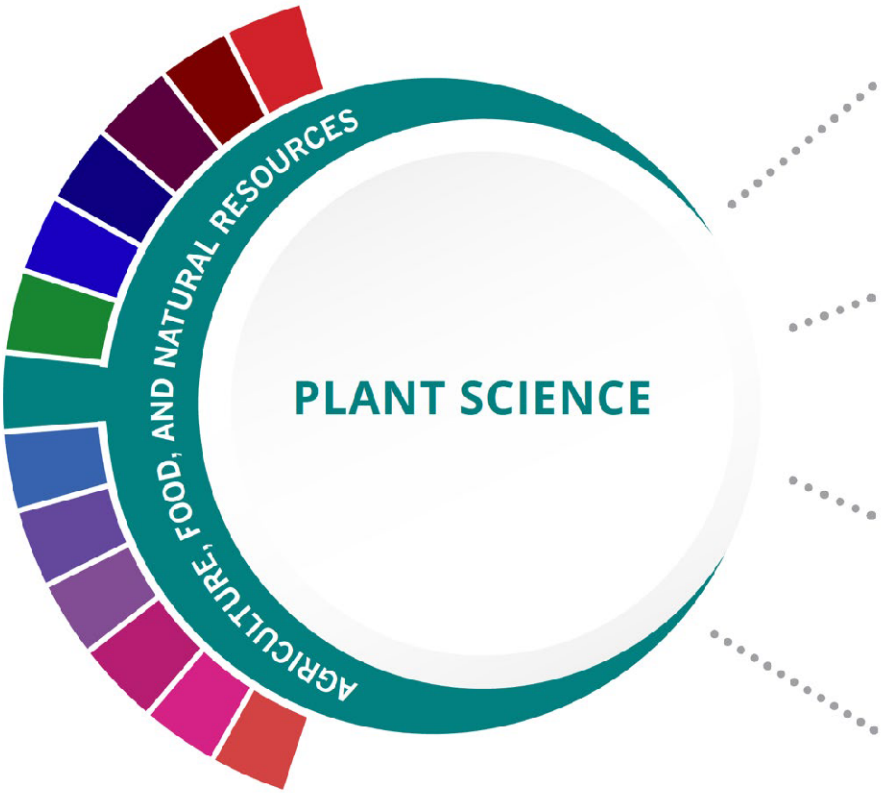

9th	Principles of Agriculture, Food, and Natural Resources
10th	Floral Design Agriculture Leadership, Research & Communication
11th	Advanced Floral Design
12th	Practicum in Agriculture, Food, and Natural Resources

HIGH SCHOOL/ INDUSTRY CERTIFICATION	CERTIFICATE/ LICENSE*	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/ DOCTORAL PROFESSIONAL DEGREE
Landscape Irrigation Technician License	Pesticide Applicator	Applied Horticulture/ Horticulture Operations, General	Applied Horticulture/ Horticulture Operations, General	Applied Horticulture/ Horticulture Operations, General
Commercial/ Noncommercial Pesticide Applicator	Certified Floral Designer	Ornamental Horticulture	Agronomy and Crop Science	Agronomy and Crop Science
Texas State Floral Association Level One Floral Certification	Accredited Member of AIFD	Agricultural Business and Management, General	Agricultural Business and Management, General	Agricultural Business and Management, General
Texas State Floral Association Level Two Floral Certification	Landscape Industry Certified Technician	Turf and Turfgrass Management	Turf and Turfgrass Management	Farm/Farm and Ranch Management

Additional industry-based certification information is available on the TEA CTE website. For more information on postsecondary options for this program of study, visit TXCTE.org.

Occupations	Median Wage	Annual Openings	% Growth
Soil and Plant Scientists	$54,662	116	21%
Tree Trimmers and Pruners	$32,240	589	14%
Pesticide Handlers, Sprayers, and Applicators	$36,733	196	22%
Landscaping Supervisors	$44,408	807	19%
Biological Technicians	$42,931	452	17%

WORK BASED LEARNING AND EXPANDED LEARNING OPPORTUNITIES

Exploration Activities:	Work Based Learning Activities:
Texas FFA	Work part-time at a florist; start or work for a local landscaping business FFA Supervised Agriculture Experience (SAE)

The Plant Science program of study focuses on the science, research, and business of plants and other living organisms. It teaches students how to apply biology and life science to real-world life processes of plants and vegetation, either in laboratories or in the field.

The Agriculture, Food, and Natural Resources (AFNR) Career Cluster focuses on the essential elements of life—food, water, land, and air. This career cluster includes a diverse spectrum of occupations, ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist. It also includes non-traditional agricultural occupations like wind energy, solar energy, and oil and gas production.

Successful completion of the Plant Science program of study will fulfill requirements of a Business and Industry endorsement or STEM endorsement if the math and science requirements are met. Revised - July 2020

TEA® Texas Education Agency

COURSE INFORMATION

COURSE NAME	SERVICE ID	PREREQUISITES (PREQ) COREQUISITES (CREQ)	GRADE
Principles of Agriculture, Food & Natural Resources	1300200 - 1 credit	None	9-10
Floral Design	13001800 - 1 credit	None	9-12
Agriculture, Leadership, Research & Communications	N1300266 - 1 credit	None	9-12
Advanced Floral Design	N1300270 - 1 credit	PREQ Floral Design	11-12
Practicum in Agriculture, Food, & Natural Resources	13002500 - 2 credits - 1st time 13002510 - 2 credits - 2nd time	PREQ Agricultural Structures, Design, & Fabrication	11-12

Principles of Agriculture, Food, & and Natural Resources

Recommended Grade Placement: 9-10
Credit(s): 1
Prerequisite: None
Principles of Agricultural Science is designed to introduce students to global agriculture. The course includes the study of agricultural career development, leadership, communications and personal finance.

Agriculture Leadership, Research, & Communications

Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: None
Agricultural Leadership, Research and Communications will focus on challenging Agriculture, Food, and Natural Resources (AFNR) students to use higher level thinking skills, develop leadership abilities, employ standard research principles, and communicate agricultural positions effectively with all stakeholders.

Floral Design

Recommended Grade Placement: 9-12
Credit(s): 1
Prerequisite: None
This course is designed to develop students' ability to identify and demonstrate the principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect for the traditions and contributions of diverse cultures. Students respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

Advanced Floral Design

Recommended Grade Placement: 11-12
Credit(s): 1
Prerequisite: Floral Design
This course continues to build on previous knowledge and incorporates advanced principles and techniques related to floral design as well as develop an understanding of the management of floral enterprises. Through the analysis of artistic floral styles and historical periods, students develop respect

for the traditions and contributions of diverse cultures. Students respond to and analyze floral designs, thus contributing to the development of lifelong skills of making informed judgments and evaluations.

Practicum in Agriculture, Food, & Natural Resources

Recommended Grade Placement: 11-12
Credit(s): 2
Prerequisite: Floral Design & Advanced Floral Design

The practicum course is for students participating in a coherent sequence of career and technical education courses in the Agriculture, Food, and Natural Resources cluster. The practicum is designed to give students supervised practical application of knowledge and skills. Practicum experiences can occur in a variety of locations appropriate to the nature and level of experiences such as employment, independent study, internships, assistantships, mentorships, or laboratories.