

Horticulture Production

Suggested Sequence:

9th Grade: 5171-Agriscience

10th Grade: 5164-Floral Design or 5167-Greenhouse Management

11th Grade: 5164-Floral Design or 5167-Greenhouse Management

12th Grade: 5175-Plant Biotechnology

5171-Agriscience

Grade Level: 9th

Credit: 1

Agriscience consists of standards that prepare students for biology, subsequent science courses and post-secondary pursuits. The content area includes ecology, biological processes, sexual and asexual reproduction and a study of the chemical and physical laws that govern life processes. This course helps students understand the important role agricultural science serves as industry moves into the 21st century. FFA and supervised experience will be included as appropriate.

5167-Greenhouse Management

Grade Level: 10th, 11th

Credit: 1

Recommended Prerequisites: Agriscience

This course is designed to prepare a student to manage a greenhouse operation. Students in this class will learn to produce various ornamental crops and food crops. An understanding of structures, crop selection, and growing systems will be explored. As populations continue to expand, the importance of food production in a climate controlled environment increases. Today's agriculture students are preparing to meet the needs of a growing world. FFA and supervised experience will be included as appropriate. Dual Enrollment is offered for this course at MTSU for Juniors and Seniors.

5164-Floral Design

Grade Levels: 10th, 11th

Credit: 1

Recommended Prerequisites: Agriscience

This course is designed to introduce students to the career possibilities in the floral industry and to provide basic instruction in the techniques of floral design. It includes standards that prepare students to produce creative floral arrangements for various events and cultures. FFA and supervised experience will be included as appropriate.

5175-Plant Bio-Technology

Grade Level: 12th

Credit: 1

Recommend Prerequisites: Agriscience, Biology, Greenhouse Management, and/or Floral Design

This course is to prepare students with interests in higher-level, science-based plant agriculture. This course includes biological science standards. Students enrolled in this course will study rigorous standards related to the principles of plant growth, cell structure and functions, heredity and genetics, plant breeding and improvement, hormones and growth regulators, chemical nature of plant life, flower structure and function, seed formation and germination, DNA and biotechnology, and emerging technologies. Students will use the scientific methods to investigate a plant problem. FFA and supervised experience will be included as appropriate.