

## **Landscape and Turf Science**

### **Suggested Sequence:**

**9<sup>th</sup> Grade: 5171-Agriscience**

**10<sup>th</sup> Grade: 5163-Landscaping & Turf Science or 5167-Greenhouse Management**

**11<sup>th</sup> Grade: 5163-Landscaping & Turf Science or 5167-Greenhouse Management**

**12<sup>th</sup> Grade: 5175-Plant Biotechnology**

### **5171-Agriscience**

Grade Level: 9<sup>th</sup>

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: 10<sup>th</sup>, 11<sup>th</sup>

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.

### **5163-Landscape & Turf Science**

Grade Levels: 10<sup>th</sup>, 11<sup>th</sup>

Credit: 1

*Recommended Prerequisites: Agriscience*

Landscaping and Turf Management includes standards to prepare students for creating beautiful environments for homes and businesses. This study includes site analysis and preparation, landscape drawing, plant selection, and installation. Maintenance of healthy attractive landscapes and turf areas will be emphasized. With the increase of urban sprawl these career opportunities are increasing daily. Plant science and leadership skills taught in this class will prepare students to meet the demands of this exciting industry. FFA and supervised experience will be included as appropriate.

### **5175-Plant Bio-Technology**

Grade Level: 12<sup>th</sup>

Credit: 1

*Recommend Prerequisites: Agriscience, Biology, Greenhouse Management, and/or Landscape & Turf Science*

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.