



School District of Marshfield Course Syllabus

Course Name: DC Horticulture PS

Grade(s): 10-12

Length of Course: Semester

Credit: 1/2 Credit

Course Description:

DC Horticulture PS is a dual credit course that provides an overview of the science and profession of horticulture. Its role and importance throughout history, current trends, and careers are covered. Particular attention is given to horticultural crops, plant growth, and plant development.

MSTC Course Title: Intro to Horticulture

Course Number: MSTC 10-001-111

Career Cluster: Agriculture, Food and Natural Resources

Level: A.A.S. – Associate in Applied Science

Total Hours: 36 (Lecture)

Total Credits: 2

Employability Skills:

Behave responsibly – individually and cooperatively
Communicate effectively
Demonstrate cultural, social, and global awareness
Demonstrate effective critical and creative thinking
Use appropriate technology

Course Grading Information:

Grading Scale:

- A 92.5 – 100
- A- 89.5 – 92.49
- B+ 86.5 – 89.49
- B 82.5 – 86.49
- B- 79.5 – 82.49
- C+ 76.5 – 79.49
- C 72.5 – 76.49
- C- 69.5 – 72.49
- D+ 66.5 – 69.49
- D 62.5 – 66.49
- D- 59.5 – 62.49
- F < 59.49

Primary Resource(s):

Introductory Horticulture, 8th Edition
Cengage Learning
ISBN: 978-143-5480-39-1
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Course Competencies

- Describe the horticulture industry and its many specialties.
- Identify plant structure, function, growth, development, reproduction, propagation, and all the factors that affect plant health.
- Reproduce and propagate plants successfully using seed and by methods of cloning.
- Describe management strategies for common horticulture crops.
- Develop a retail sales plan and implement the plan as a member of a team.
- Develop professional and interpersonal skills conducive to career advancement.

Horticulture Course Outline

Course Description:

Interested in plants for the home and business? Use the greenhouse extensively for the production of bedding plants. Explore horticultural career opportunities, study basic plant growth and soils, learn about holiday arrangements and apply design techniques. Practice pruning techniques and develop a landscape plan. In addition, experiment and learn about plant growth (hands-on) with our hydroponics equipment.

Learning Targets:

- Demonstrate knowledge of plant propagation.
- Demonstrate knowledge and proficiency in floriculture.
- Demonstrate knowledge and proficiency in landscaping.
- Demonstrate knowledge and proficiency in gardening.

First Quarter:

- 1) Examine horticulture industry
 - a) Discuss the scope, size, and economic importance of the horticulture industry in the United States
 - b) Explain plant taxonomy system
- 2) Recognize the basic anatomy of plants and describe the function of each part
 - a) List and describe the basic anatomy of plants
 - b) Explain the process of photosynthesis
 - c) Describe the process of reproduction
- 3) Explain the basic needs of plants and the various factors that make up their environment
 - a) Describe the differences between clayey, sandy, and loamy soils
 - b) Explain what is meant by the pH value of soil
 - c) List four aboveground requirements for good plant growth
 - d) List three major plant food elements
- 4) List four types of growth regulators used in the horticulture industry
- 5) Pests and Pesticides
 - a) Outline a pest control program explaining when biological control should be used and at what point chemicals must be used
 - b) Identify insect pests and select and apply appropriate insecticides
 - c) Identify fungus diseases, rodents, mollusks and nematodes, and prescribe a chemical control for each
 - d) Select and apply herbicides so that weed control is accomplished without damage to the crop being cultivated or contamination of the environment
- 6) Propagate plants using seeds
 - a) Identify the parts of a seed and the functions of each
 - b) Prepare a medium for seeds, sow seeds, and provide the proper conditions for germination
 - c) Water, fertilize, and harden off seedlings before transplanting
 - d) Transplant seedlings into flats or pots
- 7) Collect softwood and semi-hardwood cutting wood, prepare cuttings, and root them
 - a) Examine the processes of taking cuttings

- 8) Grow and maintain healthy interior landscape plants
 - a) Mix a medium to use for growing various interior plants
 - b) List the four methods of watering interior plants
 - c) List the four major concerns in caring for interior plants

Second Quarter:

- 9) Annual Flowers
 - a) Design a bed layout using annual flowers
 - b) Demonstrate proper transplanting techniques for annual flowers
 - c) Prepare soil for annual flowers
 - d) Create hanging baskets of annual flowers
- 10) Gardening
 - a) Demonstrate techniques for the planting of a small vegetable garden
 - b) Care for a vegetable garden, producing a marketable-quality crop
 - c) Design, plant and maintain a container garden
 - d) Design, plant and a perennial garden
 - e) Design a layout for a perennial border
 - f) List the environmental factors that affect perennial gardens
- 11) Force bulbs indoors and use bulbs in the landscape
 - a) Describe the soil and fertilizer used in the flowering of bulbs
 - b) Explain how planting depth and spacing of bulbs are determined
 - c) Describe how to care for bulbs after they have flowered
- 12) Floriculture
 - a) Create a floral design
 - b) Create a corsage and boutonniere
 - c) Create attractive bows for decorative arrangements
- 13) Pruning
 - a) Demonstrate pruning a stem at the proper angle
 - b) Explain how the correct time to prune is determined

Dual Credit Notification:

This is a dual credit course with Mid-State Technical College. The course outcomes for high school students are identical to the outcomes that students at Mid-State Technical College will be expected to achieve.

Mid-State Policies and Procedures

Credit Hour Expectations - Classroom presentations are specifically planned learning experiences based on identified objectives, direct instructor involvement, and instructional delivery through physical or electronic learning environments. Credit hour expectations are a combination of classroom presentation, lab and outside student effort as outlined in the Educational Services Manual from the Wisconsin

Technical College System. The unique environment in online/hybrid classes combines the classroom presentation with the outside effort to an equivalent time expectation per credit. For specific lab and lecture credit hour for Associate Degree and Technical Diploma courses, please see the "Course Standards" section of the [Educational Services Manual](#).

Employability Skills - In addition to specific job-related training, Mid-State has identified a set of employability skills that are transferable and go beyond the content of a specific course. The college supports the following skills for all graduates of Mid-State:

- Behave Responsibly Individually and Cooperatively
- Communicate Effectively
- Demonstrate Effective Critical and Creative Thinking
- Demonstrate Cultural, Social, and Global Awareness
- Use Appropriate Technology

Learner Roles and Responsibilities - You are an adult learner and as such you are responsible for your own learning. No one else can be a "stand in" for you in the learning process. You will be held accountable for all assigned activities. You matter and what you do does make a difference. You will have an opportunity to share your unique ideas and experiences with your student peers and instructor. The form and content of your participation will determine the level of achievement, satisfaction, and enjoyment that you experience. Because others are depending on you to keep the course moving, you have an obligation to meet deadlines for completing assignments and postings.

Academic Integrity Policy - The Mid-State Board, administration, faculty, and staff believe that academic honesty and integrity are fundamental to the mission of higher education. All students are expected to maintain and promote the highest standards of personal honesty and professional integrity. These standards apply to all examinations, assigned work, and projects. Therefore, a student who is found to have been dishonest, fraudulent, or deceptive in the completion of work, willing to help others to be so, or is found to have plagiarized (presented the work of others as his or her own) is subject to disciplinary action up to and including suspension.

Exclusivity Statement - Mid-State Technical College is committed to complying with state and federal equal opportunity laws and regulations and does not discriminate in its services, employment programs, and/or its educational programs and activities. Discrimination and harassment by supervisors, co-workers, students, non-employees on the basis of race, sex, national origin, sexual orientation, age, religion, disability, or other protected class is prohibited by the College. This policy is intended to comply with all applicable state and federal laws, as well as express the College's commitment to the principles of equal opportunity for all.

Student Handbook - Refer to the Mid-State Student Handbook for more information related to student policies and procedures.

mstc.edu/student-resources/student-handbook

Student Services - All students, including online students, have access to student services including but not limited to disability services, counseling and advising, career services, and financial aid. To access student services, go to mstc.edu/student-resources/student-services.