

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: HRT 286 **Credits:** 3

Course Title: Sustainable Landscape Practices

Course Description:

Considers the theory and practical application of green infrastructure, sustainable landscape maintenance practices, regenerative landscapes, and stormwater best management practices (BMPs). Teaches the guiding principles of sustainable landscape design and development. Examines the social and economic benefits of well-designed and carefully maintained ecologically-sound urban and suburban landscapes. Lecture 3 hours per week. 3 credits.

General Course Purpose:

This course will introduce students to the need to create Sustainable Landscapes and identify the long-term needs of the future and factoring them into the planning, design, implementation and maintenance phases of a project. The driving forces in support of Sustainable Landscapes include Climate Change, Water Quality Degradation, Increased Impervious Cover, and Reduced Biodiversity.

Course Prerequisites/Corequisites:

None

Course Objectives:

Upon completing the course, the student will be able to:

- Recognize the various natural cycles and their impact on the environment. To include the Hydrologic Cycle, Carbon Cycle, Nitrogen and Phosphorous Cycles, and Pollution.
- Identify the use of Native Plants to promote an increase in Biological Diversity, Reduced maintenance, and Cost Savings.
- Recognize the key benefits of Sustainable Landscapes to include the Preservation of Vegetative Cover, Protect Soil and Water Resources, Reduce Waste, and Protect Wildlife habitat and pollinators.
- Explain the methods to accomplish their Sustainable goals through Site Analysis, Concept Design, and Plant Selection for the landscape.

Major Topics and Outcomes Included:

- Natural cycles and human impacts on the environment
- Native plants
- Key benefits of sustainable landscapes
- Stormwater best management practices
- Economics of sustainable landscapes
- Design goals for sustainable landscapes
- Construction, monitoring, and maintenance

Effective Date/Updated: November 20, 2023