

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: HRT 295

Credits: 3

Course Title: Topics in Horticulture: Sustainable Landscape Design

Course Description: Will expose students to the concept of “Sustainable Landscape Design” as presented by the **Sustainable Sites Initiative**. The **Sustainable Sites Initiative** is a partnership with the American Society of Landscape Architecture (ASLA), the Lady Bird Johnson Wildflower Center, and the United State Botanical Garden in conjunction with a diverse group of stakeholder organizations to establish and encourage sustainable practices in landscape design, construction, operations, and maintenance. The **Sustainable Sites Initiative** is the peak national dialogue on sustainable site design issues. It provides a strong foundation for understanding the requirements, as related to site design for LEED* certification. Students will utilize the on-line publication, **Sustainable Sites Initiative**, and also become familiar with well-recognized, significant examples of sustainable landscape design through visual case studies. Lecture 3 hours. Total 3 hours per week.

General Course Purpose: The **Sustainable Sites Initiative** explains how students in the field of Horticulture can utilize a nationally shared understanding of **Sustainability Guidelines and Performance Benchmarks** to achieve more sustainably designed landscapes. Students will learn the process of site selection, pre-design assessment and planning, site design as related to water, soil, and vegetation, as well as plant and hardscape selection. In addition, students will study sustainable site design as related to human health and well-being, construction, operations, and maintenance. Finally, students will better understand the role of monitoring and innovation and the importance of continual critical evaluation of success.

Course Prerequisites and Co-requisites:

None

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Learn the shared language, process, actions, and achievements of sustainable landscape design as presented through case studies;
- b. Become familiar with the terms of the nationally recognized LEED* rating systems (Leadership in Energy and Environmental Design - Green Building Rating Systems) for the design, construction, and operation of high performance green buildings and green sites, as established by the USGBC (United States Green Building Council);
- c. Gain a foothold in the process of becoming LEED* certified consultants; and
- d. Become more confident in their own design participation in creating more sustainable sites, whether institutional, housing, historic preservation, commercial, or residential projects.

Major Topics and Outcomes to Be Included:

- a. Tested recognition of significant historic and contemporary sustainable models of design
- b. Production of written and illustrated analytical critique of local project sites, successes, and weaknesses
- c. Design proposal of a “re-design” of a real local site to achieve a more sustainable outcome

Date Created/Updated (Month, Day, Year): January 5, 2019

*LEED -- Leadership in Energy and Environmental Design - Green Building Rating Systems