Common Course Outline HORT 126

Green Roof, Green Wall Technology 3 credits

Community College of Baltimore County

Description

HORT126 - 3 credits - Green Roof, Green Wall Technology examines the concept of green roof and green wall technologies. The origins, rationale for their use and their construction are presented. The benefits of their use to both the structure and the environment are examined and evaluated. Their costs, steps in construction, and plant species used is also studied.

3 credits; 2 lecture hours and 2 laboratory hours per week

Prerequisites: ACLT 052 and MATH 081

Overall Course Objectives

Upon completion of this course the student will be able to:

- 1. trace the origins of green roof and wall technologies from their beginning to present time;
- 2. describe the installation of the green roof and the green wall on existing structures;
- 3. list the steps, materials, and specifications involved in their construction;
- 4. outline an on-going maintenance program for these features and describe how they are accomplished;
- 5. describe the relationship of green roof and green wall with other green building technologies;
- 6. evaluate the value of the green roof for storm water mitigation;
- 7. evaluate their value, in terms of structural climate control;
- 8. apply the specifications and pricing structure involved in the construction of a green roof and a green wall;
- 9. determine the proper placement of a green wall in terms of sunlight and other environmental factors:
- 10. identify the plants and their use in this technology;
- 11. contrast the various types of green roof and green wall styles;
- 12. identify vendors of this technology and contrast the difference in their products;
- 13. apply the skills to construction of a model green wall, green roof on campus; and
- 14. start and grow-on plants for this technology in a greenhouse, developing the cultural guidelines for this procedure.

Major Topics

- I. Green roof and green wall origins
- II. Procedures and materials involved in green roof and green wall construction
- III. Environmental and structural benefits of the green roof and green wall
- IV. Plant materials appropriate for these structures
- V. Planting and on-going care of these structures
- VI. Application of skills to the planting of these structures

Course Requirements

<u>Grading/exams</u>: Grading procedures will be determined by the individual faculty member but will include the following:

- 1. 3 Exams and Final Exam
- 2. Design of Green Roof, Green Wall and/ or Planting
- 3. Participation

Other Course Information

This course is a Horticulture Program core course and is required for the Horticulture A. A. S. Degree.

It is also a required course for the following Horticulture certificates:

Greenhouse Production Landscape Design and Installation

Date Revised: 05/25/2011