THE UNIVERSITY OF MARYLAND

CHESAPEAKE PROJECT WORKSHOP

PROFESSOR: Dr. Steven Cohan

COURSE: PLSC 452 Environmental Horticulture

Information derived from the workshop will be integrated into course discussions. Students are presented with landscape practices associated with the establishment and sustainability of plant materials. Beginning with a site analysis discussions will integrate alternatives to ameliorating the soil in preparation for plant installations. This would include incorporation of natural organic materials which will enhance the development of microorganisms and thus a sustainable terrestrial environment. Mycorrhizae which are endemic to most soils are absent in commercially developed sites. Their reincorporation with organic materials will exemplify biomicry. The latter of which I became aware of in the workshop will be further emphasized in discussions of antagonistic microorganisms for weed and disease control. Biomicry will also be manifested in the student's assignment of analyzing a natural ecosystem and determining the abiotic and biotic factors that are required to maintain a viable balance. One example being a forest ecosystem with its multi-layer vegetation that attracts beneficial insects and whose foliage decomposes into the forest floor thereby providing a renewable nutrient resource.

The course will also dwell on environmental stewardship throughout the course, indicating the impact of individuals on their immediate environment and the Chesapeake Bay by their daily lives and their roles in commercial and residential landscape companies. Their stewardship will be related to Best Management Practices as they pertain to landscape management and their impact on the environment. These will include plant selection from the perspective of low input requirements of establishment and maintenance, use of Integrated Pest Management, organic fertilizers, water harvesting and water efficient irrigation systems.

The culmination of the student's knowledge will be incorporated into a final project that will require integrating sustainable landscape management practices into the design of a new or existing landscape site.