

Virginia Western Community College
HRT 205
Soils

Prerequisites

None.

Course Description

Teaches theoretical and practical aspects of soils and other growing media. Examines media components, chemical and physical properties and soil organisms. Discusses management and conservation. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week. 3 credits.

Semester Credits: 3 Lecture Hours: 2 Lab/Clinical/Internship Hours: 2

Required Materials**Textbook:**

Soil Science and Management. 5th edition. ISBN-13: 978-1-4180-3865-6, ISBN-10: 1-4180-3865-2

Other Required Materials:

None.

Course Outcomes

At the completion of this course, the student should be able to:

- Collect soil samples and analyze soil test results.
- Classify soil samples using textural characteristics.
- Identify soil-less media components and characterize their origin, water-holding capacities and drainage qualities.
- Describe technical data printed on commercial fertilizer containers and use this information to calculate application rates.
- Apply knowledge of pH to soil management practices.

Topical Description

- The Importance of Soil – Chapter 1
- Soil Origin and Development – Chapter 2
- Physical Properties of Soil – Chapter 4
- Life in the Soil – Chapter 5
- Organic Matter – Chapter 6
- Soil Water – Chapter 7
- Soil Fertility – Chapter 10
- Soil pH and Salinity – Chapter 11
- Plant Nutrition – Chapter 12
- Soil Sampling and Testing – Chapter 13
- Fertilizers – Chapter 14
- Organic Amendments – Chapter 15

Notes to Instructors

- None