

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. AGRI

COURSE NUMBER: 1103

NUMBER OF CREDITS: 3

Lecture: 2 Lab: 1 OJT: 0

Course Title:

Introduction to Soil Science

Catalog Description:

Introduction to Soil Science introduces students to the origin, formation, and classification of soils. This includes the physical, chemical, and biological properties of soils, soils as a medium for plant growth, elements, water, air, organic matter, and plant and animal life in the soil.

Prerequisites or Necessary Entry Skills/Knowledge:

None

FULFILLS MN TRANSFER CURRICULUM AREA(S)

- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered

The Importance of Soil

Soil Origin and Development

Physical Properties of Soil

Soil Water

Soil and Water Conservation

Organic Matter

Life in the Soil

Government Agencies and Programs

Student Learning Outcomes

Describe the physical and chemical composition of soil.

Explain the processes soil formation

Explain the importance of soil for life and the environment.

Identify types of soils
Classify soils based on their texture.
Analyze soil pH and its relationship to plant growth.
Analyze soil nutrients and its relationship to plant growth.
Explain the importance of good soil structure and its relationship to healthy soils.
Evaluate best management practices for soil and water conservation.
Describe the forms of soil water and its relationship to plant growth.

Is this course part of a transfer pathway: Yes No

Revised Date: 7-15-2020