

# Minnesota

## Articulated College Credit (ACC) Agreement

[www.CTEcreditMn.com](http://www.CTEcreditMn.com)

**Agreement Name:** **MN Soil Science**

**Agreement Last Reviewed:** **Fall 2024**

**Next Review Date:** **Fall 2026**

| Colleges                                     | College Courses                          | College Programs  | Articulated College Credit                   |
|--|--|---|--|
| Hennepin Technical College                   | LNDC 1271 – Soil Science                 | *Landscape/ Horticulture (A.A.S. – 72 cr.); *Landscape Design & Construction (A.A.S. – 72 cr.) *Greenhouse Mgt. Technician (A.A.S. – 60 cr.); *Urban Forestry Technician (A.A.S. – 60 cr.) *Landscape Design & Construction (Diploma – 64 cr.) *Landscape/ Horticulture (Diploma – 64 cr.) *Professional Gardening (Certificate – 29 cr.) | 1 credit of 3 total credits (3 hrs. lecture) |
| Ridgewater College                           | AGRI 1650 – Soils & Fertility Management | *Agricultural Science and Technology (A.S. – 60 cr)   | 1 credit of 3 total credits (3 hrs. lecture) |
| South Central College                        | PLSC 1100 – Soils I                      | *Production Agriculture (A.A.S – 72 cr.) *Farm Production, Management, & Operations (Diploma – 72 cr.) *Sustainable Microfarming (Certificate – 16 cr.)   | 1 credit of 3 total credits (3 hrs. lecture) |
| Minnesota West Community & Technical College | AGRI 1103 – Introduction to Soil Science | *Agriculture Production (A.A.S. – 72 cr.) *Agriculture Production Management (A.S. – 60 cr.) *Plant Science/Precision Agriculture (A.S. – 60 cr.) *Production Agriculture (Diploma – 64 cr.)  | 1 credit of 3 total credits (3 hrs. lecture) |

### **Course Description**

This course will help the student recognize the various types of soils and how plants respond to various soils and soil fertility. (Prerequisites: None)

### **Curriculum Content Objectives**

To receive credit, students will be introduced to 100% of the following content objectives by qualified CTE high school instructors:

1. Define soil
2. Explain percolation
3. Classify soils
4. Demonstrate knowledge of the history of soil science
5. Demonstrate knowledge of soil formation
6. Demonstrate knowledge of soil texture
7. Utilize texture triangle
8. Explain soil separates/textures

9. Demonstrate knowledge of soil water
10. Demonstrate knowledge of soil pH
11. Demonstrate knowledge of soil tests
12. Demonstrate knowledge of soil fertility
13. Describe soil physical and chemical composition
14. Compare soil structures
15. Identify organic matter functions
16. Describe soil weathering
17. List soil organisms
18. Identify aeration factors
19. Explain organic soils
20. Describe land drainage
21. Determine soil conservation importance
22. Identify soil loss characteristics
23. Describe land capability classes
24. Explain available soil water
25. Identify forms of erosion
26. Describe conservation tillage
27. Identify erosion control measures
28. Demonstrate knowledge of fertilizers

**Recommended Industry-Recognized Certification  
Or Comprehensive Assessment – High School or College**

Plant & Soil Science I Precision Exams [www.precisionexams.com](http://www.precisionexams.com)

**Assessments**

Students must achieve no less than 80% or B for a final grade in the high school course to receive ACC.

**ACC Concept**

Through Articulated College Credit (ACC), specific college curriculum content goals and assessments are embedded in participating high school career and technical education (CTE) programs as specified in this agreement. Relevant knowledge, skills, and standards are taught by qualified CTE high school instructor(s) in one or more high school courses. ACC is awarded if the student meets the college equivalency standards and later enrolls in the college(s) listed below requiring the course in a specific program.