

Minnesota Articulated College Credit (ACC) Agreement

www.CTEcreditMn.com

Agreement Name **MN Soil Science**

Agreement Last Reviewed **Fall 2024**

Next Review Date **Fall 2026**

Colleges	College Courses	College Programs	ACC
Hennepin Technical College	LNDC 1271 – Soil Science	<ul style="list-style-type: none"> • 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 credits
Ridgewater College	AGRI 1650 – Soils & Fertility Management	<ul style="list-style-type: none"> • Agri Business (A.A.S. – 72 cr.) • Agri Business (Diploma – 72 cr.) • Agriculture Science and Technology (A.S. – 60 cr.) • Agronomy Technology (Diploma – 72 cr.) • Dairy Management (A.A.S. – 72 cr.) • Dairy Management (Diploma – 72 cr.) • Farm Operation and Management (A.A.S – 72 cr.) • Farm Operation Management (Diploma – 72 cr.) • Precision Agriculture (A.A.S – 72 cr.) • Precision Agriculture (Diploma – 72 cr.) 	1 credit of 3 credits
South Central College	PLSC 1100 – Soils I AND PLSC 1200 – Soils II	<ul style="list-style-type: none"> • Agribusiness (A.A.S. – 72 cr.) • Agribusiness Sales, Service, and Management (Diploma – 72 cr.) • Agribusiness Chemical Applicator Technician (Certificate – 30 cr.) • Agronomy (Certificate – 13 cr.) • Agricultural Education Technology Partnership (A.S. – 60 cr.) • Production Agriculture – (A.A.S. – 72 cr.) • Farm Production, Management, and Operations (Diploma – 72 cr.) 	1 credit of 3 credits AND 1 credit of 3 credits
Minnesota West Community & Technical College	AGRI 1103 – Introduction to Soil Science	<ul style="list-style-type: none"> • 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 credits

Course Description

This course will help the student recognize the various types of soils and how plants respond to various soils and soil fertility.

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 <https://www.youscience.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.