

# Dakota County Technical College

## LAHT 1000: Plant Science

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 1

Lab Hours/Week: 1

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers the study of biology of higher plants, including morphology, physiology, and taxonomy. Emphasis is placed on knowledge relevant to landscape horticulture. Prerequisites: None

**B. COURSE EFFECTIVE DATES:** 03/23/1998 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

## **D. LEARNING OUTCOMES (General)**

1. classify plants
2. define plant science terms
3. describe plant cell structure
4. describe plant growth processes
5. describe root morphology
6. describe seed structure
7. explain seed germination
8. list requirements for plant growth
9. observe plant growth process
10. summarize history of plant science
11. summarize plant taxonomy
12. describe flower morphology
13. describe fruit morphology
14. describe leaf morphology
15. describe meiosis
16. describe mitosis
17. describe plant adaptations
18. describe plant breeding
19. describe pollination and fertilization
20. describe seed dispersal
21. describe stem morphology
22. explain cold hardiness
23. explain mineral nutrition in plants
24. explain photoperiod responses
25. explain photosynthesis
26. explain plant genetics
27. explain plant tropisms
28. explain respiration
29. explain transpiration
30. explain vascular functions
31. explain water relations in plants
32. list plant growth regulators
33. list plant pigments
34. research horticultural scientific journals

## **E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

## **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

## **G. SPECIAL INFORMATION**

None noted