

# Dakota County Technical College

## ELEC 1220: Analog and Digital Electronics Lab

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: \*.\*

Lab Hours/Week: 4

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers connecting, testing, and analyzing semiconductors, power supplies, amplifiers, digital circuits, microprocessor applications, sensors, and signal coupling materials/devices. Prerequisites: None.

**B. COURSE EFFECTIVE DATES:** 08/21/2003 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

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

1. Observe semiconductors
2. Analyze amplifier circuits
3. Analyze digital circuits
4. Analyze microprocessor applications
5. Analyze power supplies
6. Analyze semiconductors
7. Analyze sensors
8. Analyze signal coupling devices
9. Connect amplifier circuits
10. Connect digital circuits
11. Connect microprocessor circuits
12. Connect power supplies
13. Connect semiconductors
14. Connect sensors
15. Connect signal coupling devices
16. Observe amplifiers
17. Observe digital circuits
18. Observe microprocessor applications
19. Observe power supplies
20. Observe sensors
21. Observe signal coupling devices
22. Test amplifier circuits
23. Test digital circuits
24. Test microprocessor circuits
25. Test power supplies
26. Test semiconductors
27. Test sensors
28. Test signal coupling devices
29. Use microprocessor circuits

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

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted