

# Dakota County Technical College

## ELEC 1210: Analog and Digital Electronics Theory

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course covers the theory of semiconductors, power supplies, amplifiers, digital circuits, microprocessor applications, sensors, and signal coupling materials/devices. Prerequisites: ELEC1110, ELEC1120, MATS1205.

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

**C. OUTLINE OF MAJOR CONTENT AREAS**

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

1. Apply uses of amplifiers
2. Apply uses of digital circuits
3. Apply uses of microprocessors
4. Apply uses of power supplies
5. Apply uses of semiconductors
6. Apply uses of sensors
7. Apply uses of signal coupling devices
8. Apply uses of signal coupling materials
9. Define functions of amplifiers
10. Define functions of digital circuits
11. Define functions of microprocessors
12. Define functions of power supplies
13. Define functions of semiconductors
14. Define functions of sensors
15. Define functions of signal coupling devices
16. Define functions of signal coupling materials
17. Name amplifiers
18. Name digital circuits
19. Name microprocessors
20. Name semiconductors
21. Name signal coupling devices
22. Name the types of signal coupling materials
23. Name types of power supplies
24. Name types of sensors

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

None

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

As noted on course syllabus

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

None noted