A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: *.*
Lab Hours/Week: *.*
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

Fundamental principles of electricity and electronics. Various topics are explored including basic circuits, transformers and motors.

B. COURSE EFFECTIVE DATES: 08/25/2014 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. AC/DC
2. Digital Electronics
3. Electrical codes
4. Electrical safety
5. Fiber optics
6. How electricity works
7. Intro. to components and reading schematics
8. Kirchoff's Law
9. Lab Safety - BSU general lab policy
10. Occupations in electricity/electronics
11. Ohm's Law
12. Portfolio of course materials
13. Print reading, basic wiring, and materials of the trade
14. Producing and distributing electricity
15. Research report on specified topic
16. Soldering
17. Terminology
18. Use of the multimeter

D. LEARNING OUTCOMES (General)

1. be presented topics through lecture, discussion, and demonstration that are relevant to Technological Studies Department emphasis and career areas relating to electricity and electronics
2. use the computer lab and library as well as other reference sources

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

None
F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted