Bemidji State University

PHYS 6030: Survey of Electronics

A. COURSE DESCRIPTION

Credits: 3
Lecture Hours/Week: 0
Lab Hours/Week: 0
OJT Hours/Week: *.*
Prerequisites: None
Corequisites: None
MnTC Goals: None

A broad survey of the principles of electronics. Topics include series and parallel circuits, Kirchhoff's rules, capacitors and inductors, and digital ICs. Prerequisites: Licensed Physics Teacher or B.S. Degree in Physics.

B. COURSE EFFECTIVE DATES: 05/11/2020 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Series and parallel circuits
2. Kirchhoff’s rules
3. Capacitors
4. Inductors
5. Digital ICs

D. LEARNING OUTCOMES (General)

1. create and analyze breadboard circuits.
2. examine digital ICs.
3. survey the principles of electronics.
4. determine how to implement Kirchhoff’s rules in series and parallel 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