COMMON COURSE OUTLINE: Course discipline/number/title: BU 1611: Basic Electricity

A. CATALOG DESCRIPTION
   1. Credits: 1
   2. Hours/Week: 1
   3. Prerequisites (if any): Admission into BUM Program, Completion of all BUM I courses with a grade of “C” or above; MATH 1015 or placement test into MATH 0098 and MATH 1016.
   4. Co-requisites (if any): None
   5. MnTC Goals (if any): NA

   This course covers the basic concepts of AC and DC electricity. Included are voltage, current, resistance, and power usage in series, parallel, and combination circuits.

B. DATE LAST REVISED (use current date): January, 2014

C. OUTLINE OF MAJOR CONTENT AREAS:
   1. Theory of Electricity
   2. Simple Circuits
   3. Resistance, Voltage, and Amperage

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Describe resistance.
   2. Describe voltage.
   3. Describe current.
   4. Explain open and short circuits.
   5. Calculate current in series and parallel circuits.
   6. Calculate voltage in series and parallel circuits.
   7. Calculate resistance in series and parallel circuits.
   8. Calculate current in a combination circuit.
   11. Calculate voltage drop.
   12. Describe electrical power.
   13. Calculate power to a lamp.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
   Grades will be based on a percentage of the total possible points from all graded activities.

G. RTC CORE OUTCOME(S) ADDRESS(S):
   - Communication
   - Critical Thinking
   - Global Awareness/Diversity
   - Civic Responsibility
   - Personal/Professional Accountability
   - Aesthetic Response

H. SPECIAL INFORMATION (if any):
   Attendance is essential.