COMMON COURSE OUTLINE: Course discipline/number/title: BU 1570: Basic Boiler Theory

A. CATALOG DESCRIPTION
   1. Credits: 1
   2. Hours/Week: 4 hrs/4 weeks
   3. Prerequisites (Course discipline/number): Enrollment in the BUM program or Instructor permission.
   4. Co-requisites (Course discipline/number): None
   5. MnTC Goals (if any): NA

This course is a preparatory class for the MN Special Engineers License using videos, CDs lectures and class discussions. Materials covered will include, Minnesota Boiler Statues, Heat transfer theory, Boiler design, Boiler systems, fittings and accessories, fuels and combustion, Boiler maintenance, inspections and operating conditions will also be discussed.

B. DATE LAST REVISED (Month, year): January, 2015

C. OUTLINE OF MAJOR CONTENT AREAS:
   1. Minnesota Boiler Statues and Codes.
   2. Boiler design and uses.

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Identify Boiler types and uses.
   2. Identify and describe major Boiler systems.
   3. Identify and describe functions of system fittings and accessories.
   4. Describe fuels and combustion draft relationships.
   5. Identify Boiler operating conditions, plant hazards and safety procedures.
   6. Identify maintenance practices, inspection preparations, and material handling.
   7. Describe safety procedures and communication practices.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
   Minnesota Special Engineers Boiler exam score.

G. RCTC CORE OUTCOME(S) ADDRESSED:
   ☑ Communication
c Civic Responsibility
   ☑ Critical Thinking
   ☑ Personal/Professional Accountability
   ☐ Global Awareness/Diversity
   ☐ Aesthetic Response

H. SPECIAL INFORMATION (if any): None