COMMON COURSE OUTLINE: Course discipline/number/title: BU 2512: Commercial Refrigeration

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 3
3. Prerequisites (if any): BU 2500
4. Co-requisites (if any): None
5. MnTC Goals (if any): NA

This course covers fundamentals of Commercial and Special Refrigeration; condensers, evaporators, compressors, troubleshooting. These concepts will be applied in BU 2515. Recommended Entry Skills/Knowledge: High School Diploma or GED.

B. DATE LAST REVISED (use current date): April, 1997

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Evaporators and the refrigeration system.
2. Condensers, compressor, and expansion devices.
3. Special refrigeration system components.
4. Troubleshooting and system operations.

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Explain commercial and domestic refrigeration systems differences.
2. Compare different commercial mechanisms.
3. Describe condenser operation.
4. Describe evaporator operation.
5. Describe compressor operation.
6. Describe outdoor air-cooled condensing units.
7. Describe different water-cooled condensers.
8. Differentiate cooling towers.
9. Explain evaporative condensers.
10. Differentiate three classes of evaporators.
11. Describe liquid-cooling evaporators.
12. Differentiate ice-making mechanisms.
13. Describe defrosting methods.
14. Identify types of commercial refrigeration.
15. Explain types of commercial refrigeration applications.
16. Differentiate commercial and industrial applications.
17. Differentiate absorption and compression refrigeration systems.
18. Describe types of absorption system.
19. Explain commercial absorption system.
20. Describe expendable refrigerant systems.
21. Discuss special refrigeration systems.
22. Demonstrate evacuation of refrigeration system.
23. Demonstrate recharging refrigeration system.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Quizzes
2. Tests

G. SPECIAL INFORMATION (if any): None