COMMON COURSE OUTLINE: Course discipline/number/title: PMT 1900: Open Manufacturing Lab II

A. CATALOG DESCRIPTION
1. Credits: 6 (0 credits lecture, 6 credits lab)
2. Hours/Week: 12
3. Prerequisites (Course discipline/number): PMT 1095, PMT1105, PMT 1115, PMT 1255, PMT 1300
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course is an open lab in machining fundamentals. The student will have hands on experience on manual and basic CNC machine shop equipment. Topics of study will include safety, measuring parts to print, proper set up, speeds and feeds, and cutting tool usage.

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

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Shop Safety
2. Speeds and Feeds
3. Cutting tools
4. Set ups
5. Measurements
6. CNC Turning
7. CNC Machining
8. Importing and Exporting CNC data

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Setup advanced precision manufacturing techniques.
2. Apply advanced precision manufacturing techniques.
3. Work in a hands-on lab environment.
4. Adhere to all safety standards as used within industry.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Skill evaluation
2. Project evaluation
3. Tests
4. Pre and post tests
5. Time keeping for hours working in open lab

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

H. SPECIAL INFORMATION (if any): None