COMMON COURSE OUTLINE: Course discipline/number/title: CAD 1323: Basic Dimensioning

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 1 hour lecture, 4 hours lab
3. Prerequisites (Course discipline/number): CAD 1039, CAD 1200, CAD 1220, CAD 1221 or instructor’s permission
4. Co-requisites (Course discipline/number): CAD 1120, CAD 1123, CAD 1150, CAD 1122
5. MnTC Goals (if any): NA

This course is designed to teach basic machine dimensioning using various drafting standards. Students will be introduced to dimensioning multiview drawings and assemblies using several different dimensioning methods including ordinate, baseline, continuous, and dual dimensioning. Students will also learn how to implement drawing revisions and be introduced to the concept of flat pattern design. This course will be taught in a state-of-the-art facility featuring the latest release of SolidWorks.

B. DATE LAST REVISED (Month, year): April, 2013

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Working drawings
2. Dimensioning Standards
3. Dimensioning variations
4. Ordinate dimensioning
5. Baseline dimensioning
6. Tabular dimensioning
7. Reverse Engineering
8. Development drawings (flat patterns)

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Create a variety of working drawings of parts and assemblies.
2. Demonstrate the ability to alter CAD dimension settings for different situations.
3. Create CAD drawings which follow different dimensioning variations including ordinate and tubular.
4. Produce flat pattern drawings.
5. Use revision blocks to accurately record revisions.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Evaluation of electronic files
2. Skill proficiency exercises
3. Quizzes and Exams

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

H. SPECIAL INFORMATION (if any):
Tuition differential