COMMON COURSE OUTLINE: Course discipline/number/title: CAD 2335: Working Drawings and Design

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 1 hour lecture, 4 hours lab
3. Prerequisites (Course discipline/number): CAD 1039, CAD 2323, CAD 2358, CAD 2460 or instructor’s permission
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course combined all facets of the first year classes into individual and team projects. More attention is given to geometric tolerancing, fits and detailing practices, and the assembly of parts. This course will be 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. Tolerancing
   a) Limits
   b) Metric
   c) Fits
   d) Geometric dimensioning and symbols
   e) Lay symbols
2. Working drawings
   a) Notes and information
   b) Title block
3. Design
4. Assembly drawings
5. Parts lists

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Explain fits.
2. Explain surface texture terms and symbols.
3. Use basic hole system.
4. Apply geometric tolerances.
5. Utilize tabular, ordinate and coordinate systems.
6. Identify good design characteristics.
7. Demonstrate teamwork.
8. Draw detailed parts.
10. Make oral presentation.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Tests
2. Quizzes
3. Oral presentation
4. Drawings

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

H. SPECIAL INFORMATION (if any):
   Tuition differential