

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

A. CATALOG DESCRIPTION

1. Credits: 3
2. Hours/Week: 1 lecture, 4 lab
3. Prerequisites (Course discipline/number): CAD 2323, CAD 2324, CAD 2358, CAD 2460
4. 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. Students must receive a grade of C or better in all prerequisite courses.

B. DATE LAST REVISED (Month, year): October, 2017

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.
9. Draw assembled parts.
10. Make oral presentation.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:

Methods may include but not limited to:

1. Tests
2. Quizzes
3. Oral presentations
4. Drawings

G. RCTC CORE OUTCOME(S) ADDRESSED:

Personal and Professional Accountability. Students will take responsibility as active learners for achieving their educational and personal goals.

H. SPECIAL INFORMATION (if any): None