MDAD 1256: Design Project 1 for CAD Design

A. COURSE DESCRIPTION

   Credits: 3
   Lecture Hours/Week: 3
   Lab Hours/Week: *
   OJT Hours/Week: *

   Prerequisites:
   This course requires the following prerequisite
      MDAD 1253 - Working Drawings 2 for CAD Design

   Corequisites: None

   MnTC Goals: None

   This course is a design class that will focus on the design process. The student will gain confidence in his or her ability to apply sound product design parameters based on design considerations. A holistic approach will be used to incorporate the many functions of a designer in a company. The content goals of the course will change with the individual student's design. The course can be taken in conjunction with Design Project II or alone. (Prerequisite: MDAD1253) (3 credits: 3 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 01/24/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

   1. Analyze product design
   2. Analyze manufacturing design
   3. Analyze the designer's role
   4. Analyze product parameters
   5. Analyze industrial design
   6. Analyze product complexity
   7. Examine similar designs
   8. Formulate design sequence
   9. Contact consultants
  10. Analyze power sources
  11. Analyze product strength
  12. Analyze product weight
  13. Analyze safety
  14. Analyze interchangeability
  15. Analyze protective coatings
  16. Calculate costs
  17. Organize work

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

   None
F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted