COMMON COURSE OUTLINE: Course discipline/number/title: CAD 1150: CAD Data Communications

A. CATALOG DESCRIPTION
1. Credits: 3 (1 credit lecture, 2 credit lab)
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): None
5. MnTC Goals (if any): NA

The course offers students the capability of integrating CAD data with MS Office products and graphics programs to create projects in a “hands on” environment. Students will create projects using the CAD prototype shop - learning to operate the laser, rapid prototype machine, CNC router and Acrylic bender. These skills will make CAD majors more productive in the workplace. 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. Integrating CAD data with MS Office products.
2. Import/export CAD data
3. Use of CAD data in graphics tools
4. Universal Laser
5. Dimension Rapid Prototype Machine
6. ShopBot CNC
7. Photo enhancement and cropping software
8. Acrylic Bender
9. Scanning, tracing, and drawing graphics
10. Email, Internet and the world-wide-web

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Demonstrate Office products within a CAD work environment.
2. Import/Export CAD data correctly.
3. Use the Universal Laser creatively for projects.
5. Use the vinyl cutters to create projects.
6. Use the ShopBot CNC.
7. Scan, crop, and modify photos.
8. Develop creative skills.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Projects
2. Presentations
3. Examinations

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