COMMON COURSE OUTLINE

ROCHESTER COMMUNITY AND TECHNICAL COLLEGE

Course discipline/number/title: CAD 1123: Technical Illustration

A. **CATALOG DESCRIPTION**
    1. Credits: 2
    2. Hours/Week: 1 lecture, 2 lab
    3. Prerequisites (Course discipline/number): CAD 1039, CAD 1120, CAD 1220, and CAD 1221
    4. MnTC Goals (if any): NA

    This course will cover the techniques used for generating pictorial drawings using CAD. The student will become familiar with a variety of applications in which pictorial drawings produced within a CAD program are used to illustrate technical information outside of CAD. This course will be taught in a state-of-the-art facility featuring the latest release of SolidWorks. Students must receive a grade of C or better in all pre-requisite courses.

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

C. **OUTLINE OF MAJOR CONTENT AREAS:**
    1. Axonometric and Pictorial views
        a) Isometric
        b) Dimetric
        c) Trimetric
        d) Pictorial applications
        e) Perspective views
        f) Repair Parts Diagrams
        g) Rendering
        h) Exporting geometry
        i) Integrating CAD data with other applications
        j) Assembly instruction sheet

D. **LEARNING OUTCOMES (GENERAL):** The student will be able to:
    1. Produce axonometric and perspective views using CAD.
    2. Export CAD data to other programs for use as an illustration.
    3. Describe a variety of technical illustration applications.
    4. Explain the pros and cons of the different types of views.
    5. Create documents using imbedded illustrations.

E. **LEARNING OUTCOMES (MNTC):** NA

F. **METHODS FOR EVALUATION OF STUDENT LEARNING:**
    Methods may include but not limited to:
    1. Evaluation of electronic files
    2. Skill proficiency exercises
    3. Quizzes
    4. Exams

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