



Wayne County Community College District

COURSE SYLLABUS

DRT 113 Descriptive Geometry

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

Occupational oriented solutions to descriptive geometry problems involving points, lines, planes and single and double curved surfaces and their intersections.

PREREQUISITES: *DRT 102*

EXPECTED COMPETENCIES:

Upon completion of this course, the student will:

1. Know how to read and interpret industrial prints without laboriously learning how to make mechanical drawings or master drafting techniques
2. Identify the application of drawing fundamentals and drafting symbols as recommended by the American Standards Association
3. Identify and become acquainted with the terminology frequently used in the machine trades
4. Study and familiarize her/himself with the principles of mechanical drawing and the related technical information used to interpret new materials of assigned prints
5. Will learn and identify the reproduction machines that are employed by industry in reproducing drawings from an original and / or master design
6. Learn the basic mathematical and measuring skills applied to blueprint reading used for the solution of various shop problems
7. Know and apply the fundamental procedures that are connected with the consideration of design to produce concept in industry:
 - 7.1 Distribution and use of blueprints departments of manufacturing establishments and organizational structures of the plant
 - 7.2 Material control, tooling, die making, production and etc.
8. Develop a high degree of accuracy in interpreting problems in the following and current drafting practices:
 - 8.1 Three view drawings
 - 8.2 Two view drawings
 - 8.3 One view drawings
 - 8.4 Sectional views
 - 8.5 Screw threads, etc.
9. Summary problems covering all of these fundamentals. Will identify the trade theory and apply same to reading problems and prints as they may relate to dimensioning, shape description, machine operation and other data which may be required in the fabricating, construction, assembly and operation of parts and units
10. Will know how to develop a freehand drawing assignment so that she/he can apply certain principals of projection and other drawing practices
11. Will develop a high level of competency in metric dimensioning which is becoming mandatory in dealing with products in the international industry
12. Will learn welding symbols that are standard in the industry



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ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A

80%-89.9% = B

70%-79.9% = C

60%-69.9% = D

<60% = E