

SYLLABUS
PART I
EDISON COMMUNITY COLLEGE
EGR 110S – PRINT READING AND SKETCHING
2 CREDIT HOURS

COURSE DESCRIPTION

Introduction to various types of engineering drawings. Recognition of electrical symbols, mechanical symbols, and welding symbols is developed. Skill in freehand drawing of 3 dimensional objects is developed. Rendering of orthographic projections as well as auxiliary views, sectioning, oblique views and isometric views is practiced. Standard practices of scale, and dimensioning are applied.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
3	1. Identify engineering prints and symbols and relate them to physical equipment.	1
3	2. Prepare hand sketch prints that accurately convey critical technical information.	1,6
3	3. Construct orthographic views of a 3 dimensional object.	1
3	4. Apply proper dimensions, title blocks, notes and revisions to drawings.	1
3	5. Construct auxiliary, oblique and isometric views of an object.	1
2	6. Associate the use of engineering drawings as a communication tool.	1,9
1	7. Read engineer's scale and metric scales and understand scale factors.	1
3	8. Complete geometric construction of objects.	1
1	9. Identify line types on engineering drawings.	1
3	10. Demonstrate the use of tolerancing.	1,2
1	11. Identify assembly drawings, their parts, and materials utilized	1

CORE VALUES

The Core Values are a set of principles, which guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Introduction to print reading
2. Angles, scales, and scale factors
3. Freehand sketching
4. Geometric construction
5. Orthographic projections
6. Lettering and dimensioning
7. Sectional views
8. Tolerances
9. Auxiliary, oblique, and isometric views
10. Title blocks, materials, notes and revisions
11. Welding prints, plastics prints, and electrical prints