

SYLLABUS

DIVISION: Workforce Services

REVISED: 2016

CURRICULA IN WHICH COURSE IS TAUGHT: Precision Machining Technology

COURSE NUMBER AND TITLE: CAD 120 – Introduction to Graphic Representation

CREDIT HOURS: 3 **HOURS/WK. LEC:** 2 **HOURS/WK. LAB:** 3 **LEC/LAB COMB:** 5

=====

I. CATALOG DESCRIPTION:

CAD 120 teaches use of instruments, lettering, sketching, and drawing conventions. Emphasizes legible drawings and the value of presentation.

II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES IN WHICH IT IS TAUGHT:

To teach students the basics of drafting so that they might understand the procedures necessary and be able to interpret blueprints better in the machine shop.

III. REQUIRED BACKGROUND:

None

IV. COURSE CONTENT:

1. Parametric drafting concepts
 - a. Sketches
 - b. 3-D drafting
 - c. Constraining sketches
 - d. Construction geometry
 - e. Sketch planes
 - f. Geometry as it pertains to sketching
 - g. Section views
 - h. Tolerancing
 - i. Blueprint creation

V. The following General Education Objectives will be addressed in this course:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Communications | <input checked="" type="checkbox"/> Computational and Computer Skills |
| <input checked="" type="checkbox"/> Application of Skills | |
| <input checked="" type="checkbox"/> Critical Thinking | <input checked="" type="checkbox"/> Understanding Science and Technology |
| <input checked="" type="checkbox"/> Interpersonal Skills and Human Relations | <input checked="" type="checkbox"/> Preparation for Entry into Workforce |

VI. LEARNER OUTCOMES**VII. EVALUATION**

Learner outcome <ul style="list-style-type: none">• Read and interpret part blueprints	Evaluation method <ul style="list-style-type: none">• Lab exercises and written test
Learner outcome <ul style="list-style-type: none">• Create sketches of parts	Evaluation method <ul style="list-style-type: none">• Lab exercises and written test
Learner outcome <ul style="list-style-type: none">• Create part drawings	Evaluation method <ul style="list-style-type: none">• Lab exercises and written test
Learner outcome <ul style="list-style-type: none">• Create orthographic projection drawings	Evaluation method <ul style="list-style-type: none">• Lab exercises and written test

VIII. Over 90% of the students complete this class.