

South King County Tech Prep Consortium
Drafting Competencies
Renton Technical College

DFT 101 INTRODUCTION TO DRAFTING – 4 cr

PERFORMANCE COMPETENCIES: The student will be able to produce basic mechanical drawings by mastering the following:

- 01 Use drafting equipment, measuring scales, drawing media, drafting instruments and consumable materials.
- 02 Apply line styles, weights (Alphabet of Lines).
- 03 Apply freehand lettering techniques.
- 04 Apply axonometric sketching techniques.
- 05 Prepare graphical presentations with balance and layout of simple multi-view sketches.
- 06 Identify and use appropriate scales.
- 07 Use conversion tables for fractions, decimals and metric measurements.
- 08 Use of reprographics equipment. I. e., blueprint machine (diaz process).
- 09 Identify and apply line styles, weights (Alphabet of Lines).
- 10 Prepare title blocks, other drafting formats and revision blocks.
- 11 Prepare basic geometric construction.
- 12 Prepare simple multi-view drawings
- 13 Apply simple dimensioning.
- 14 Select proper drawing scale, views and layout.
- 15 Prepare drawings containing horizontal and vertical surfaces.
- 16 Prepare drawings containing circles and arcs.
- 17 Prepare drawings containing inclined and oblique surfaces.
- 18 Prepare drawings incorporating partial views.
- 19 Prepare drawings incorporating removed details and conventional breaks.
- 20 Prepare isometric drawings.
- 21 Prepare drawing containing linear standard dimensions and notes.
- 22 Prepare drawings containing linear standard dimensions and notes.
- 23 Prepare drawings that include circular standard dimensions.
- 24 Prepare drawings using metric dimensions.

DFT 106 MECHANICAL DRAFTING – 5 cr

PERFORMANCE COMPETENCIES: Given the necessary equipment the student will be able to

- 01 Prepare drawings containing full sections and half sections.
- 02 Prepare drawings containing offset sections.
- 03 Prepare drawings containing revolved sections.
- 04 Prepare drawings containing removed sections and broken-out sections.
- 05 Prepare drawings containing orthographic projections. (Top, Front, and Right side)

DFT 113 INTRO TO CAD – 5 cr

PERFORMANCE COMPETENCIES: The student will be able to prepare basic computer aided drawings.

- 01 Produce a border and title block.
- 02 Produce a simple multi-view drawing.
- 03 Produce a simple multi-view drawing with a title block.
- 04 Use CAD output devices (i.e., printer/plotter) to produce drawings.
- 05 Select proper drawing scale, views and layout.
- 06 Prepare drawings containing horizontal and vertical surfaces.
- 07 Prepare drawings containing inclined and oblique surfaces.
- 08 Prepare drawings containing full sections.
- 09 Create template files (.dwt)
- 10 Creating & Exporting template files (.dwf)
- 11 Creating & Exporting template files (.dxf)

DFT 121 INTRO TO ARCHITECTURAL DRAFTING – 5 cr

PERFORMANCE COMPETENCIES: The student will be able to prepare basic computer aided drawings.

- 01 Produce a border and title block.
- 02 Produce a Floor plan with Sections and Details.
- 03 Produce Elevations with Sections and Details.
- 04 Use CAD output devices (i.e., printer/plotter) to produce drawings.
- 05 Select proper drawing scale, views and layout.
- 06 Prepare drawings containing horizontal and vertical surfaces.
- 07 Prepare drawings containing full sections.

DFT 131 COMPUTER FAMILIARIZATION – 2 cr

PERFORMANCE COMPETENCIES: The student will be able to identify internal components of a computer.

- 01 Identify components and terms of the computer.
- 02 Use of basic “survival” Windows Explorer.
- 03 Demonstrate knowledge of basic commands required to operate specific computer software programs such as CAD.

Approved 9/28/09