**ENGR 105 – Computer Aided Design**

**Competencies**

Apply the Line, Polyline, Spline, Multiple, and Polygon commands using both pull-down and side menus.

Apply the Circle, Arc, Ellipse, Donut, and Dragmode commands.

Properly use edit commands such as Erase, Redraw, and Oops.

Obtain drawing information by using the Help command.

Complete drawings using Relative coordinates.

Complete drawings using Polar coordinates.

Apply the Grid, Snap and Axis commands.

Apply the Undo and Redo commands.

Use Object Snap and AutoTrack to create accurate drawings quickly

Complete drawings using the Change, Move, Copy, Mirror, and Offset commands.

Use the Array command to make multiple objects and patterns

Modify drawings using the Stretch, Scale, Rotate, Trim and Extend commands.

Modify objects using Grips, Properties, and Additional Selection techniques

Apply the Zoom, Pan, Regen and Viewers commands.

Create multiple Viewports in model space.

Place notes and specifications using the Text, Style, Ddedit, Dtext and Qtext commands.

Do preliminary sketches of drawings.

Develop a proto-type drawing on AutoCAD.

Complete drawings using pull-down and side menus.

Properly dimension drawings.

Edit and Revise drawings.