

DEPARTMENT: TECHNOLOGY EDUCATION	COURSE TITLE: C.A.D. DRAFTING 1A & 1B COURSE NUMBERS: 530A AND 530B
GRADE(S): 9-12	PRE-REQUISITES (IF ANY): NONE

UNIT	LENGTH	CONTENT	SKILLS	METHODS OF ASSESSMENT	FRAMEWORK STRAND(S) & STANDARD(S)
Intro to drafting tools	2 days	<ul style="list-style-type: none"> T square, triangles, compass, protractor, scales, etc. 	Students will: <ul style="list-style-type: none"> Use the tools properly and safely 	<ul style="list-style-type: none"> Worksheets 	STE-S4, 9/10, 1.3 STE-S4, 6-8, 3.2
Geometric construction	5 days	<ul style="list-style-type: none"> Circles, arcs, bisecting lines and angles, polygons, tangents and ellipse 	Students will: <ul style="list-style-type: none"> Identify the terms in geometric const. and draw the shapes 	<ul style="list-style-type: none"> Worksheets 	STE-S4, 1.3
Measuring and scaling	On going	<ul style="list-style-type: none"> Measuring with American standard and metric 	Students will: <ul style="list-style-type: none"> Determine the difference between American standard and metric Measure with different scales 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4,9/10, 1.3 STE-S-4,6/8, 2.2, 2.3
Line types	On going	<ul style="list-style-type: none"> Solid, object, hidden, center, section, phantom, dimension, extension, leader, cutting plane, and break lines 	Students will: <ul style="list-style-type: none"> Identify and properly use the different line types in the drawings 	<ul style="list-style-type: none"> Worksheets Drawings Written test 	STE-S-4, 1.3 Expectations #1
Lettering	On going	<ul style="list-style-type: none"> Gothic letters and numbers for improved legibility 	Students will: <ul style="list-style-type: none"> Be able to letter and number drawings correctly and neatly 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 1.3
Orthographic sketches and drawings	8 weeks	<ul style="list-style-type: none"> Sketching Orthographic or multi-view drawings 	Students will: <ul style="list-style-type: none"> Be able to sketch and or draw multi-view orthographic projections of different objects 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4,9/10, 1.2, 1.3, 1.4 M- 10.M.10, 8.M.4, 8.G.5
Dimension a drawing	8 weeks	<ul style="list-style-type: none"> Dimensions 	Students will: <ul style="list-style-type: none"> Dimension a drawing to the correct size and scale 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 9/10, 1.3, 1.4, 7.1 M- 10.M.10, 8.M.4
Auxiliary drawings	2 weeks	<ul style="list-style-type: none"> A view other than the typical front, top and side views, perpendicular to a slanted surface 	Students will: <ul style="list-style-type: none"> Be able to draw an auxiliary view of an object 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 9/10, 1.2, 1.3, 1.4, 7.1 M- 10.M.10

Section view	2 weeks	<ul style="list-style-type: none"> Full, half, revolved and removed section views looking into the middle of an object 	<p>Students will:</p> <ul style="list-style-type: none"> Be able to draw section views of machine parts 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 9/10, 1.2, 1.3, 1.4, 7.1 M- 10.M.10
Isometric drawings	4 weeks	<ul style="list-style-type: none"> A pictorial drawing that uses 30* projections 	<p>Students will:</p> <ul style="list-style-type: none"> Be able to draw an object or part using the isometric style Be able to draw an isometric circle with a compass or template 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 9/10, 1.2, 1.3, 1.4 M- 10.M.10, 8.M.4
Oblique drawings	4 weeks	<ul style="list-style-type: none"> Oblique drawings 	<p>Students will:</p> <ul style="list-style-type: none"> Be able to determine the difference between cavalier and cabinet oblique and draw them 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 9/10, 1.2, 1.3, 1.4, 7.1 M- 10.M.10
Threads and fasteners	5 Weeks	<ul style="list-style-type: none"> Thread terms, theory, and methods of representation, use of tables and charts 	<p>Students will:</p> <ul style="list-style-type: none"> Be able to identify and label and draw different common fasteners 	<ul style="list-style-type: none"> Worksheets Drawings Tests. 	STE-S-4, 9/10, 1.2, 1.3, 1.4, 2.3 M- 10.M.10, 8.M.4, 8.G.5
Electrical schematic symbols	2 weeks	<ul style="list-style-type: none"> Electronics drafting topics include the meanings of electronics terms, electrical component descriptions, electronic component symbols, and PC board conductor spacing 	<p>Students will:</p> <ul style="list-style-type: none"> Be able to identify and draw the different schematic symbols that are used in electrical or electronic drafting 	<ul style="list-style-type: none"> Worksheets Drawings 	STE-S-4, 9/10, 1.3, 1.4