

Learning Goals and Scales
2015-2016

Unit: Mechanical Drawing

Learning Goals:

In this unit:

1. *Students will be able to use common drafting tools to produce technical images.*
2. *Students will demonstrate knowledge/skills with Orthographic Projection.*

Rigorous Learning Goal/Scale 1

Course:	Engineering – Mechanical Drawing
Score 4 Additional Success with the complex content and concepts—inferences, novel applications	In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. <ul style="list-style-type: none"> • <i>Student demonstrates knowledge/skills with use of tools and can combine independently decide how to achieve various layouts/applications.</i> <p>Student makes no major errors or omissions regarding the score 4 content</p>
Score 3 Mastery of complex content and concepts of learning goal	TARGET LEARNING GOAL: The student will <ul style="list-style-type: none"> • <i>be able to use common drafting tools to produce a variety of basic technical images.</i> <p>Student makes no major errors or omissions regarding the score 3 content</p>
Score 2 Success with simpler content—vocabulary, foundational skills	The student will recognize or recall specific vocabulary or basic content, such as: <ul style="list-style-type: none"> • <i>parallel straight edge, triangles, leads, compass, line weight</i> The student will perform basic skills or process, such as: <ul style="list-style-type: none"> • Basic math operations, Read a ruler/measure, draftsmanship, alphabet of lines, order of process, Layout <p>Student makes no major errors or omissions regarding the score 2 content</p>
Score 1 Partial success with help	With help, student achieves partial success at score 2 content and/or score 3 content
Score 0 No success even with help	Even with help, no success

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Rigorous Learning Goal/Scale 2

Course:	Engineering – Mechanical Drawing
Score 4 Additional Success with the complex content and concepts—inferences, novel applications	In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. <ul style="list-style-type: none"> <i>Student demonstrates knowledge visualizing, drawing and centering orthographic views and can determine which views are necessary to use in a plan.</i> <p>Student makes no major errors or omissions regarding the score 4 content</p>
Score 3 Mastery of complex content and concepts of learning goal	TARGET LEARNING GOAL: The student will <ul style="list-style-type: none"> <i>be able to read/produce 2d orthographic views of 3d objects.</i> <p>Student makes no major errors or omissions regarding the score 3 content</p>
Score 2 Success with simpler content—vocabulary, foundational skills	The student will recognize or recall specific vocabulary or basic content, such as: <ul style="list-style-type: none"> <i>parallel straight edge, triangles, leads, compass, line weight</i> The student will perform basic skills or process, such as: <ul style="list-style-type: none"> Basic math operations, Read a ruler/measure, draftsmanship, alphabet of lines, order of process, Layout <p>Student makes no major errors or omissions regarding the score 2 content</p>
Score 1 Partial success with help	With help, student achieves partial success at score 2 content and/or score 3 content
Score 0 No success even with help	Even with help, no success