



**CADD I**

Teacher: Scott Danielson

**September 2020**  
CADD 1


Content	Skills	Learning Targets	Standards	Assessment	Resources & Technology
<p><b>CEQ:</b> <b>WHAT AND HOW IS COMPUTER AIDED DRAFTING AN INFLUENCE IN INDUSTRY?</b></p> <p><b>UEQ:</b> •<i>What is CADD 1 about and what is expected of students?</i></p> <p><b>A. Course Introduction</b></p> <p>A1. Class Outline A2. Grading procedure A3. Cadd impact on industry</p>  <p><b>UEQ:</b> •<i>What careers are available with drafting training?</i></p>	<p><b>A. Course Introduction</b> A1-A2. Identify course content and grading. A3. Identify how computer-aided drafting (CAD) impacts the manufacturing industry</p> <p><b>B. Careers</b> B1. Identify careers in the drafting industry.</p>	<p><b>A. Course Introduction</b> A1-A2. I can recall from my notebook all course content and grading procedure. A3. I can list 3 ways Cadd impacts industry</p> <p><b>B. Careers</b> B1. I can list 10 careers in Drafting.</p>		<p><b>A. Course Introduction</b> A1-2. Discussion with students A3. Evaluate list</p> <p><b>B. Careers</b> B1. Discussion with students</p>	<p><b>A. Course Introduction</b></p> <p><b>B. Careers</b></p>

<p><b>B. Careers</b></p> <p>UEQ: •<i>What is needed to know to get started with drafting?</i></p> <p><b>C. Preparation to Drafting</b></p> <p>C1. Tools and Materials C2. Sketching C3. Measurement C4. Scales C5. Alphabet of lines</p> <p>UEQ: •<i>How is the computer used in 2D drafting?</i></p> <p><b>D. Computer Introduction 2Dimensional</b></p> <p>D1. Evolution of CAD hardware and software D2. Windowing and zoom</p>	<p><b>C. Preparation to Drafting</b></p> <p>C1. Identify all tools and materials needed to complete drawings. C2. Demonstrate the ability to sketch lines, arcs and circles. C3. Create sketches and detailed drawings utilizing inch and metric measurement. C4. Measure using mechanical, civil and architectural scales. C5. Identify and apply the "Alphabet of lines" according to ASME (American Society of Mechanical Engineers) standards.</p> <p><b>D. Computer Introduction 2Dimensional</b></p> <p>D1. Differentiate between different CAD systems. D2-D7. Experiment with</p>	<p><b>C. Preparation to Drafting</b></p> <p>C1. I can identify all tools and materials needed to complete drawings. C2. I can demonstrate the ability to sketch lines, arcs and circles. C3. I can create sketches and detailed drawings utilizing inch and metric measurement. C4. I can measure using mechanical, civil and architectural scales. C5. I can identify and apply the "Alphabet of lines" according to ASME (American Society of Mechanical Engineers) standards.</p> <p><b>D. Computer Introduction 2Dimensional</b></p>	<p>B1. Assess list</p> <p><b>C. Preparation to Drafting</b></p> <p>C1. CSA- Quiz on drafting tools and materials C2-C4. Teacher observation of student project C5. CSA- Quiz on "Alphabet of lines" C1-C5. Teacher led class discussion</p> <p><b>D. Computer Introduction</b></p>	<p><b>C. Preparation to Drafting</b></p> <p>C1-C5. Engineering Drawing and Design - Delmar publishing - pages22-56</p> <p><b>D. Computer Introduction 2Dimensional</b></p> <p>D1-D7. Engineering Drawing and Design - Delmar publishing - pages97-131</p>
--	---	--	--	---

<p>D3. Coordinate system                  D4. Drawing tool palette                  D5. Edit tool palette                  D6. Object snap tool palette                  D7. Dimension tool palette</p> 	<p>the commands of the AutoCAD software.                  D2. Utilize zoom commands                  D3. Demonstrate the use of absolute, relative and polar coordinate inputs by solving lab problems.                  D4-D6. Solve lab activities by using drawing, edit and object snap tools.                  D7. Dimension the lab assignment.</p>	<p>D1. I can list 5 differences between CAD systems.                  D2-D7. I can experience 10 different commands in AutoCAD software.                  D2. I can demonstrate usage of zoom commands.                  D3. I can complete a drawing using absolute, relative and polar coordinate inputs.                  D4.-D6. I can complete a drawing using drawing, edit and object snap tools.                  D7. I can properly dimension a drawing.</p>	<p><b>2Dimensional</b>                  D3. CSA- Modeling lab assignments                  exercise 2-6                  lab 1&amp;2                  D5. CSA- Modeling lab assignments                  array, chamfer, copy, extend, fill, et, mirror, offset, scale, stretch, trim                  D6. CSA- Modeling lab assignments                  lab 4                  D7. CFA- Modeling lab assignments                  dimen, edit</p>	
--	---	---	---	--

**October 2019**  
 CADD 1

Content	Skills	Learning Targets	Assessment	Resources & Technology
---------	--------	------------------	------------	------------------------

<p><b>CEQ:</b></p> <p>UEQ: •How is the computer used in 3D drafting?</p> <p><b>E. Computer Introduction 3Dimensional</b></p> <p>E1. Windowing and zoom E2. Coordinate system E3. Drawing tool palette E4. Edit tool palette E5. Object SNAP tool palette E6. Dimension tool palette</p> 	<p><b>E. Computer Introduction 3Dimensional</b></p> <p>E1-E6. Experiment with the commands of Autodesk Inventor CAD software. E1. Utilize zoom commands E2. Demonstrate the use of absolute, relative and polar coordinate inputs by solving lab problems. E3-E5. Solve lab activities by using drawing, edit and object snap tools. E6. Dimension the lab assignment.</p>	<p><b>E. Computer Introduction 3Dimensional</b></p> <p>E1-E6. I can experiment with the commands of Autodesk Inventor CAD software. E1. I can utilize zoom commands E2. I can demonstrate the use of absolute, relative and polar coordinate inputs by solving lab problems. E3-E5. I can solve lab activities by using drawing, edit and object snap tools. E6.I can dimension the lab assignment.</p>	<p><b>E. Computer Introduction 3Dimensional</b></p> <p>E1- E6. Modeling lab assignments Inventor sample problems 1-9 E1- E6. 3D print required parts</p>	<p><b>E. Computer Introduction 3Dimensional</b></p> <p>E1-E6. Engineering Drawing and Design - Delmar publishing - pages97-131</p>
--	--	---	--	--

**November 2019**  
CADD 1



**Content**

**Skills**

**Learning Targets**

**Assessment**

**Resources & Technology**

<p>UEQ: •<i>What are the basic concepts to drafting?</i></p> <p><b>F. Drafting Concepts</b></p> <p>F1. Isometric drawing F2. Oblique drawing F3. Orthographic projection F4. Assembly drawing F5. Blueprint reading F6. Dimensioning </p>	<p><b>F. Drafting Concepts</b></p> <p>F1-F4. Demonstrate the ability to spatially visualize 2D and 3D objects and sketch the appropriate views to pictorially communicate the object drawn.</p> <p>F1- F4. Create detailed drawings utilizing computer-aided drafting software based on sketches generated.</p> <p>F1-F4. Construct pictorial and multi-view drawings according to ASME standards.</p> <p>F5 Accurately read drawings.</p> <p>F6. Dimension both sketches and CAD drawings according to ASME standards.</p>	<p><b>F. Drafting Concepts</b></p> <p>F1-F4.I can demonstrate the ability to spatially visualize 2D and 3D objects and sketch the appropriate views to pictorially communicate the object drawn.</p> <p>F1- F4. I can create detailed drawings utilizing computer-aided drafting software based on sketches generated.</p> <p>F1-F4. I can construct pictorial and multi-view drawings according to ASME standards.</p> <p>F5 I can read drawings to determine sizes placement, etc. of parts</p> <p>F6.I can dimension both sketches and CAD</p>	<p><b>F. Drafting Concepts</b></p> <p><b>F1-F2. CSA-Modeling assignments</b> <b>Isometric 333-1,2,4,8</b> <b>Oblique 335-3,10,13</b></p> <p><b>F3. CSA- Modeling assignments</b> <b>Orthographic 118-1,2,3,6</b></p> <p><b>F4. CFA- Modeling assignments</b> <b>Puller assembly drawing</b></p>	<p><b>F. Drafting Concepts</b></p> <p> Dimensioning notes</p>
--	---	---	---	--

		drawings according to ASME standards.		
--	--	---------------------------------------	--	--