



Revised: 02/19/2019
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JC Schools Metals Technology II Yearly Standards

Overarching Standards		
9-12.MT.LO.01 Recall and follow safety rules in the basic operations of hand and power tools		
Units	Priority Standards	Supporting Standards
Unit 1 Shop Knowledge 12 Days	9-12.MT.LO.27 Review careers relating to the metals industry 9-12.MT.LO.03 Identify and describe the different metals used in the metal working industry 9-12.MT.LO.04 Identify and describe the fasteners used in metalworking	9-12.MT.LO.05 Evaluate the proper uses of each fastener and why they are important to the industry
Unit 2 Industrial Math 11 Days	9-12.MT.LO.06 Apply knowledge of adding and subtracting fractions to solve practical problems 9-12.MT.LO.28 Use advanced industry measuring and layout tools	9-12.MT.LO.08 Demonstrate an understanding of metric and standard measuring 9-12.MT.LO.29 Perform measurements utilizing calipers and micrometers
Unit 3 Gas Metal Arc Welding	9-12.MT.LO.30 Utilize Gas Metal Arc Welding to assemble a project	9-12.MT.LO.31 Perform and setup the Gas Metal Arc Welding for proper usage 9-12.MT.LO.32

32 Days		<p>Demonstrate proper repairs on external components of Gas Metal Arc Welding</p> <p>9-12.MT.LO.33 Weld various joints utilizing the Gas Metal Arc Welding process</p>
<p>Unit 4</p> <p>Machining</p> <p>10 Days</p>	<p>9-12.MT.LO.34 Utilize the lathe to assemble a project</p>	<p>9-12.MT.LO.35 Demonstrate the basic techniques of operating the lathe</p> <p>9-12.MT.LO.36 Identify and describe the major parts of the lathe</p>
<p>Unit 5</p> <p>Sheet Metal</p> <p>11 Days</p>	<p>9-12.MT.LO.37 Utilize sheet metal to assemble a project</p>	<p>9-12.MT.LO.21 Recall basic tools used while working with sheet metal</p> <p>9-12.MT.LO.38 Explain and identify different attachment options for sheet metal assembly</p> <p>9-12.MT.LO.39 Demonstrate and explain the various folds and bends utilized in the sheet metal industry</p>
<p>Unit 6</p> <p>Oxy-Acetylene</p> <p>12 Days</p>	<p>9-12.MT.LO.40 Utilize the Oxy-Acetylene process to assemble a project</p>	<p>9-12.MT.LO.41 Demonstrate proper use of the oxy-acetylene torch</p> <p>9-12.MT.LO.42 Perform horizontal cuts on metals using the oxy-acetylene torches</p>