

Skilled and Technical Sciences (STS) 6

Course Description

In this course students will begin to explore fundamentals in Skilled and Technical Sciences.

Code:

Program(s) of Study to which This Applies

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Course Framework	Reference Standards	Academic Crosswalk
<p>Standard 1. Students will understand and accurately apply measurement.</p> <p>Benchmark 1.1 Demonstrate linear measurement</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Read a ruler 	<p>KS - MNC10.01.01 KS – ESS01.03.01 KS – ESS01.03.02 KS – ESS01.03.04 STL12.1 STL13.F</p>	<p>MA6.2.5 (1) SC8.1.1.j (1)</p>
<p>Standard 2. Students will know and model safe lab procedures and techniques.</p> <p>Benchmark 2.1 The student will know safety requirements.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> Follow lab procedures Demonstrate proper storage and handling of materials Demonstrate safe tool operation Demonstrate proper use of safe personal protection equipment 	<p>KS - MNC06.05.03 KS – ACC06.01.03 KS – ESS06 KS – SCC06 KS – SCPA10.02.04 STL12.H-K</p>	
<p>Standard 3. Students will be introduced to Design and Problem Solving.</p>		

<p>Benchmark 3.1 Design/Problem Solving</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Identify the problem • Brainstorm for ideas • Select best solution • Complete model/prototype • Test and evaluate model/prototype • Redesign and improve 	<p>KS - MNC03 KS – ACC03.01.01 KS – ACC03.01.05 KS – ACC07.01 KS – TRC03 KS – TRC07 KS – ESS03.01 KS – ESS03.02 KS – ESS03.03 KS – SCPA10.01.04 STL8E-G STL9.F-H STL11.H</p>	<p>MA6.2.4 (1) MA6.2.5 (1) CCSS: MA(6.G.1) (1) SC8.1.3 (2)</p>
<p>Standard 4. Students will define Technology.</p>		
<p>Benchmark 4.1 The student will understand the core concepts of technology.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Human made • Product and process • Systems model • Invention and innovation 	<p>KS - MNC10.01.02 KS - MNC05 KS – ACC05 KS – TRC07 STL1.F-H STL2.M-P,T STL7.F</p>	
<p>Benchmark 4.2 The student will be aware of technological impacts</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Cost and benefits • Societal responsibilities 	<p>KS - MNC10.01.02 KS – MNC05.01.03 KS – ACC08.01.01 KS – ACC08.01.03 STL4.D-G STL5.D-F STL6.D-G STL7.C</p>	
<p>Standard 5. Students will explore career opportunities.</p>		
<p>Benchmark 5.1 The students will examine and report on the Skilled and Technical</p>		

<p>Sciences (STS) Career Field.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Architecture & Construction • Manufacturing • Science, Technology, Engineering, & Math (STEM) • Transportation, Distribution, & Logistics (TDL) 	<p>KS – MNC04 KS – MNC09 KS – ACC04 KS – ACC05.03.01 KS – ESS09.07 KS – SCC09.01 STL18.F-G STL19.H STL20.F-I</p>	
<p>Benchmark 5.2 The students will explore and report on emerging technologies.</p> <p><u>Sample performance indicators:</u></p> <ul style="list-style-type: none"> • Robotics • Nanotechnology • Green Technologies • Space Exploration • Energy 	<p>KS – MNC04 KS – MNC09 KS – ACC04 KS – ACC10.02.02 STL14.G STL15.F,H STL16.E-F STL17.H STL18.F STL19.F-G</p>	

Draft

Reference Standards Sources

- KS = Career Clusters Knowledge and Skills Statements. Revised 2008. National Career and Technical Education Foundation, Silver Spring, MD. www.careerclusters.org.
- (additional reference standards listed)

Contributors

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Other Information

Suggestions for innovative teaching and learning strategies:	<ul style="list-style-type: none"> • Listed here (not sentences) – Arial, 11 – no effect. Bulleted list. No space following list. •
Related assessments:	<ul style="list-style-type: none"> • Listed here (not sentences) – Arial, 11 – no effect. Bulleted list. No space following list. •
Extended learning opportunities:	<ul style="list-style-type: none"> • Listed here (not sentences) – Arial, 11 – no effect. Bulleted list. No space following list. •