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

- Listed here, bulleted list, Arial 11 – no effect

Course Framework	Reference Standards	Academic Crosswalk to Common Core Standards	Academic Crosswalk to Nebraska Standards	Comments
Standard 1. Students will understand and accurately apply measurement.				
Benchmark 1.1 Demonstrate linear measurement <u>Sample performance indicators:</u> • Read a ruler	KS - MNC10.01.01 KS – ESS01.03.01 KS – ESS01.03.02 KS – ESS01.03.04 STL12.1 STL13.F	N/A	MA.6.2.5.a SC.8.1.1.j	
Standard 2. Students will know and model safe lab procedures and techniques.				
Benchmark 2.1 The student will know safety requirements. <u>Sample performance indicators:</u> • Follow lab procedures • Demonstrate proper storage and handling of materials • Demonstrate safe tool operation	KS - MNC06.05.03 KS – ACC06.01.03 KS – ESS06 KS – SCC06 KS – SCPA10.02.04 STL12.H-K	ELA.RST.6-8.3	LA.8.3.2 LA.8.1.6.k	Alignment presumes that students must comprehend oral or written instructions to complete the task. (CC: ELA. RST.6-8.3; NE: LA 12.3.2, LA.12.1.6.k)

• Demonstrate proper use of safe personal protection equipment				
Standard 3. Students will be introduced to Design and Problem Solving.				
Benchmark 3.1 Design/Problem Solving Sample performance indicators: • Identify the problem • Brainstorm for ideas • Select best solution • Complete model/prototype • Test and evaluate model/prototype • Redesign and improve	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	MTH.6.G.1	MA.6.2.4 MA.6.2.5 SC.8.1.1.b SC.8.1.1.i	Alignment presumes that students will identify problems, clarify concepts, evaluate, and propose solutions or revisions (NE: SC.8.1.1.b, SC.8.1.1.i).
Standard 4. Students will define Technology.				
Benchmark 4.1 The student will understand the core concepts of technology. Sample performance indicators: • Human made • Product and process • Systems model • Invention and innovation	KS - MNC10.01.02 KS - MNC05 KS – ACC05 KS – TRC07 STL1.F-H STL2.M-P,T STL7.F	N/A	SC.8.1.3.f	
Benchmark 4.2 The student will be aware of technological impacts Sample performance indicators: • Cost and benefits	KS - MNC10.01.02 KS – MNC05.01.03 KS – ACC08.01.01 KS – ACC08.01.03 STL4.D-G	N/A	SC.8.1.3.h	

• Societal responsibilities	STL5.D-F STL6.D-G STL7.C			
Standard 5. Students will explore career opportunities.				
Benchmark 5.1 The students will examine and report on the Skilled and Technical Sciences (STS) Career Field. Sample performance indicators: • Architecture & Construction • Manufacturing • Science, Technology, Engineering, & Math (STEM) • Transportation, Distribution, & Logistics (TDL)	KS – MNC04 KS – MNC09 KS – ACC04 KS – ACC05.03.01 KS – ESS09.07 KS – SCC09.01 STL18.F-G STL19.H STL20.F-I	ELA.WHST.6-8.7-9.	LA.8.4.1.a-c LA.8.1.6.j	The depth of students' investigations, and thus the research standards that apply, will be determined by the nature of the task. (CC: ELA.WHST.6-8.7-9; NE: LA.8.4.1.a-c, LA.8.1.6.j)
Benchmark 5.2 The students will explore and report on emerging technologies. Sample performance indicators: • Robotics • Nanotechnology • Green Technologies • Space Exploration • Energy	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	ELA.WHST.6-8.7-9.	LA.8.4.1.a-c LA.8.1.6.j SC.8.1.3.i	The depth of students' investigations, and thus the research standards that apply, will be determined by the nature of the task. (CC: ELA.WHST.6-8.7-9; NE: LA.8.4.1.a-c, LA.8.1.6.j)

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:

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Other Information

Suggestions for innovative teaching and learning strategies:	•
Related assessments:	•
Extended learning opportunities:	•