Grades 9-12 Foundations of Technology, Quarter 1, Revised 2014-15

Big Ideas/Key Concepts:

Students will use TSA guidelines to learn leadership, citizenship, and teamwork skills. Students will learn to use tools, materials, and other resources in the workshop/lab using proper safety guidelines. Students will understand the relationship between different technologies and how they connect to other fields of study and their history.

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<th>Standards</th>
<th>Student Friendly “I Can” Statements</th>
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| **Standard 1.0**  
Demonstrate leadership, citizenship, and teamwork skills required for success in the school, community and workplace through Technology Student Association. | I can conduct a self-study of personal leadership and teamwork styles.  
I can identify and use the strengths of individuals to solve a problem as a team. |
| **Standard 2.0**  
Safely use tools, materials, equipment and other technology resources. | I can explain the importance of the principles said in TSA Motto and Creed. |
| **Standard 3.0**  
Develop a knowledge and understanding of the history of technology. | I can prepare a meeting agenda for a TSA monthly/weekly meeting. |
| **Standard 4.0**  
Develop an understanding of the relationships among technologies and the connections with other fields of study. | I can participate in and conduct a meeting using approved parliamentary procedure.  
I can work with a team to develop, implement and evaluate the effectiveness of a community or school service project.  
I can successfully pass a test on general classroom, lab, and shop safety guidelines with 100% accuracy.  
I can successfully pass a test on safe use of tools and equipment used |
I can successfully pass a test on safety hazards that exist as home, school, and in the workplace.

I can use OSHA research to conduct a safety inspection of the lab and classroom.

I can understand safety rules, guidelines and nomenclature when using tools, equipment, and processes.

I can understand and explain potential safety, chemical, electrical, and fire safety hazards that exist in Technology Engineering classrooms and their school.

I can list safety rules and their importance for specific TSA competitive events.

I can develop and record information regarding the influence of a technological advancement.

I can compare and contrast inventions or innovations based on how they were developed.

I can develop and record information regarding the influence of the technological advancement on history.

I can access, retrieve, organize, and evaluate data and information to communicate.

I can use mathematical modeling techniques for making predictions about the future applications of an emerging technology.

I can conduct self-assessment of work performance based on rubric
and student check lists.

I can explain the mathematical functions (linear, quadratic, or exponential) and how they may represent an aspect of technological change.

I can define the way technological progress promotes the advancement of science and mathematics.

I can define the different traditions in science about what is studied and how the results impact society.