



SCHOOL DISTRICT OF MONROE

Preparing for the Future, One Child at a Time

Technology Education (Grade 7)

Course Description:

The curriculum for this elective course is developed from the [Wisconsin Standards for Technology and Engineering](#). Students will be exposed to and practice skills related to: measurement, safety, problem solving, fractions, scale drawing, safe tool usage, and Inventor basics. Students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Grades are determined by quizzes, tests, projects and daily work. The information in this course overview outlines what students should understand and be able to do by the end of the quarter.

Mastery Standards:

Students will think and work creatively to develop innovative solutions to problems and opportunities. (AC1)

Students will communicate and collaborate with others to accomplish tasks and develop solutions to problems and opportunities. (4C3)

Apply measurement systems in the planning and layout process. (AC1.b)

Demonstrate the safe and appropriate use of hand tools. (AC1.c)

Demonstrate the safe and appropriate use of power tools. (AC1.d)

Develop effective resolutions for a given problem, decision or opportunity using available information. (AC2.A)

Students will analyze the core concepts of technology. (BB1)

Unit	Description of Unit and Learning Targets
Unit Title: Tool ID and Use <u>Essential Questions:</u> <ul style="list-style-type: none">How do you choose and use the correct hand tools?How do you measure using a ruler/tape measure?	Students will... <u>Learning Targets:</u> <ul style="list-style-type: none">Work creatively with others to develop solutions and products.Work collaboratively with others.Demonstrate proficiency in obtaining and storing simple hand tools.Demonstrate proficiency in the use of simple hand tools.Use appropriate tools to measure and layout a piece of material within tolerances.
Unit Title: Vocabulary <u>Essential Questions:</u> <ul style="list-style-type: none">How does understanding the meaning of words help students comprehend what they are doing?	Students will... <u>Learning Targets:</u> <ul style="list-style-type: none">Work creatively with others to develop solutions and products.Work collaboratively with others.Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.
Unit Title: Measurement	Students will...

<p><u>Essential Questions:</u></p> <ul style="list-style-type: none"> • How do you choose the correct measuring device and measure parts accurately? 	<p><u>Learning Targets:</u></p> <ul style="list-style-type: none"> • Work creatively with others to develop solutions and products. • Work collaboratively with others. • Demonstrate use of the Standard Measuring System to the 1/16".
<p>Unit Title: 3D Modeling</p> <p><u>Essential Questions:</u></p> <ul style="list-style-type: none"> • How do you design a project to meet specific requirements? 	<p>Students will...</p> <p><u>Learning Targets:</u></p> <ul style="list-style-type: none"> • Work creatively with others to develop solutions and products. • Work collaboratively with others. • Create a three-dimensional (3D) model of an object.