Spring Grove Area School District Course Proposal for 2023 – 2024

Course Name: Introduction to the Trades

Course Description: This class explores the essential elements of the skilled trades. Students will develop

manual skills, earn special training and/or certifications associated with the skilled trades, and explore a plethora of STEM components. Some examples include, but are not limited

to, construction, transportation, manufacturing, computer science, audio/visual,

information technology, etc. This course is a building block of the STEM Department and

will encourage students to decide whether the trades are a good fit for their talents,

aspirations, and career interests.

Rationale: Students will rotate through different areas gaining minimal competencies skills in the

following areas: woodworking, metal fabrication, audio/visual, information technology, CAD, robotics, mathematics, and science. Students will participate in projects as they

progress through the problem solving, design, practice, and building process.

Careers in the skilled trades are in high demand throughout the country. To better prepare students for post-graduate jobs and careers, students will examine numerous components of the trades. As students gain minimum competency skills in various fields, they will gain a better understanding of where their talents and interests lie. This course is a building block of the STEM Department and will encourage students to decide whether

the trades are good fit for their talents, aspirations, and career interests.

Credit Value: .5

Meetings Per Cycle: 6

Length: 40 minutes

Weighted Value: 1.0

Grade Level: 9

Core or Elective: Core

Prerequisite: None

Pennsylvania Academic Standards: HS-ETS1-1 - Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

HS-ETS1-2 - Design a solution to a complex real-world problem by breaking it down into

smaller, more manageable problems that can be solved through engineering.

HS-ETS1-3 - Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs account for a range of constraints, including cost, safety, reliability,

and aesthetics as well as possible social, cultural, and environmental impacts.

HS-ETS1-4 - Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within

and between systems relevant to the problem.