

## Wallenpaupack Area School District

### Wallenpaupack Area Middle School

Course Title: Technology Education 6<sup>th</sup> Grade

Length of Course: 22 ½ days

---

#### District Policies:

##### ***Academic Integrity:***

Academic integrity is essential to the success of an educational community. Students are responsible for learning and upholding professional standards of research, writing, assessment, and ethics in their areas of study. Written or other work which students submit must be the product of their own efforts and must be consistent with appropriate standards of professional ethics. Academic dishonesty, which includes cheating, plagiarism, multiple submissions and other forms of dishonest or unethical behavior, is prohibited.

##### ***Assessment:***

The goal of grading is to report student progress and achievement to the parents to strengthen the home-school connection. The grade should accurately reflect the student's performance in mastering the PA Standards and the WASD curriculum.

##### ***Attendance:***

Regular school attendance is vitally important to academic success. Not only does attendance reinforce and enrich the learning process; it also establishes patterns and attitudes that will carry forward into adult work habits. Regular, consistent attendance is a prerequisite to a successful school life. Children should be absent only in cases of illness or emergency.

##### ***Special Education:***

Our commitment to each student is to ensure a free appropriate public education which begins with the general education setting, with the use of Supplementary Aids and Services. Inclusive education describes the successful education of all students with the appropriate support and services to participate in and benefit from the general classroom settings and other educational environments.

#### Course Description:

The 6<sup>th</sup> grade Technology Education course introduces students to the basics of STEM education through the use of robotics. Students will demonstrate their knowledge of problem solving, process planning, and programming.

**Pennsylvania State Standards:** All WAMS courses are aligned to the PA State Standards and Common Core Standards, where applicable.

#### Course Objectives:

##### ***Students will demonstrate the ability to:***

1. Students will **demonstrate** an understanding of the attributes of engineering and design.
2. Students will **demonstrate** an understanding of the role of troubleshooting, research and development invention, and experimentation in problem solving.
3. Students will **demonstrate** the ability to use and maintain technological products and systems.
4. Students will **demonstrate** the ability to assess the impact of products and systems.
5. Students will **demonstrate** the ability to implement and utilize robots to solve simple problems.
6. Students will **demonstrate** an understanding of and be able to select and use energy and power technologies.
7. Students will **demonstrate** the ability to develop and be able to select and use transportation technologies.

#### Student Responsibilities:

**Attendance expectations:** Attendance is essential to reaching your full potential in understanding (SUBJECT AREA) concepts.

**Homework expectations:** Technology Education does not require any work to be completed by students outside of the in-school class period.

**Make-up work:** Teacher's discretion

**Late work:** Teacher's discretion

**Assessment:****Grading components:**

Performance Quizzes      100%

**Content Pacing Guide:** The following pacing guide is a general guideline, and the instructional content/timeframe may vary.

| Topic                                   | Major Assignments | Estimated Timeframe (Classes) |
|-----------------------------------------|-------------------|-------------------------------|
| Introduction to Robotics/Robot Assembly | Completeness      | 5 classes                     |
| Moving Forward                          | Performance Quiz  | 4 classes                     |
| Turning                                 | Performance Quiz  | 5 classes                     |
| Forward Until Touch                     | Performance Quiz  | 1 class                       |
| Turn Until Angle                        | Performance Quiz  | 2 classes                     |
| Forward Until Color                     | Performance Quiz  | 3 classes                     |
| Robot Disassembly                       | Completeness      | 1 class                       |