



Woodland Middle School  
Course Syllabus  
PLTW GTT - Automation and Robotics  
2019-2020

Instructor: Ms. Hanson  
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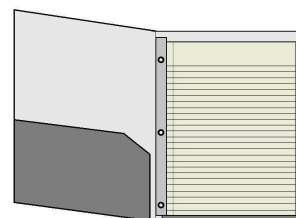
Dear Students and Parents,

Welcome to Automation and Robotics! I am excited and looking forward to our time together this trimester. My name is Ms. Hanson and I'll be your teacher for our journey of exploration through some areas and careers in mechanical and electrical engineering.

**Materials Your Student Needs: By\_\_3/6/2020\_\_\_\_\_**



- **A 1/2 inch binder or Folder with prongs and pockets – Paper inside (about 30 lined or graph paper pages)**
- Pencils or pens (you need one every day!)
- Headphones or ear-buds may be useful on occasion



**Course content and standards**

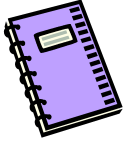
Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

**Grades and Homework**

Students will receive grades based on open response questions, projects (including self and peer evaluation), and their folder/notebook. Graded items will be returned the following Monday (or first day of school for the week). ***Parents please note: Any assignment (teamwork grades not included) can be redone and resubmitted for an improved grade for 2 weeks after the return date. After this time the assignment will be worth a maximum of 60% of the value.*** This helps take different learning speeds into account, while holding students accountable to keeping current with classroom learning. Students are reminded of this each time an assignment is returned. Homework is very rare and usually only if an assignment is not finished in class. Keep current on your grades through the student and parent Infinite Campus portals.

**Classroom Procedures/Expectations**

Through this trimester, as our focus is on active inquiry, it will be important to understand and follow the classroom procedures and expectations. In order for us to have a successful and safe exploration experience, we will need to work together to create an organized and productive classroom environment. I believe that by understanding and following the classroom expectations, we will open the door for a lot of learning and fun. Please be sure you understand these procedures and ask any questions you might have about them.



### Before class

- o Make sure you have any necessary materials
- o Bring your notebook every day, you will **NOT** be allowed to go to your locker if it is forgotten. There is a designated crate if you want to keep it in the classroom.

### During Class

- o No food or drink (clear water bottle excepted). Gum is allowed only if it is silent and invisible.



- o While we will occasionally be allowed to use personal electronic devices in class, it should be used only as directed. At all other times it should be away somewhere that it is not visible - a pocket, pencil pouch, or even in a folder.

- o Be respectful of other classes, though items around the room may look interesting always follow the rule, "If it is not yours – DON'T touch it."

- o All students are expected to work as directed – alone, in assigned pairs, or in assigned groups. (Working collaboratively is important for many STEM careers.)
- o Unsafe or inappropriate behavior during activities will result in the loss of the privilege of participation. An alternative individual assignment will be given to cover the content.

### Absences

- o Because of the hands on nature of so many of our projects, some assignments and activities will not be able to be made up. These activities will neither count for you nor against you.
- o After you return from an absence check with your table team to find out what you missed.
- o Write on your warm-up "absent" for any days you were out.

### General Expectations

- o Put forth your full effort every day. Often there will be more than one possible answer to a question, what makes your answer correct is that you support it with observations and data. This may make your brain work harder than it is used to!



### Parent/guardian Participation and Communication

I believe a student's education is a partnership between the student, his/her parents/guardians, and the school. Partnerships work best when we communicate and make the most of our combined resources. To this end, I welcome any communication from the parents/guardians of my students by phone, email or in person. I would also welcome parent participation in the classroom.

To see what we are doing in the classroom follow us on Twitter



@WMS\_STEM

If you can, our classroom could really use donations of tissues, hand sanitizer and pencils.

**Please sign, detach, and return this page by 3/6/2020**

## **PLTW Room and Computer Lab Materials and Safety Contract**

**Printed Name** \_\_\_\_\_ **pd** \_\_\_\_\_

The PLTW room and computer lab is an interesting place to learn, but due to the “hands on” nature of our activities, responsible behavior is expected. The following guidelines and rules must be followed at all times. After reading over the procedures that follow, be sure you sure you understand what is expected then please sign and return to Ms. Hanson.

Know These Rules and Procedures, you are responsible for following them!

### **The Rules and Procedures**

1. The PLTW room and computer lab is no place to be careless or foolish! You must use common sense, and Think before you act. Accidents can happen if you are not careful. You are responsible for your own behavior: demonstrate self-control and don't blame others.
2. All materials, from masking tape to computers, have a purpose in PLTW classes. Do not use or touch materials without permission. If you find something on the floor or your table please give it to Ms. Hanson immediately.
3. Never use tools for a purpose they were not intended. They could break or injure you. Never throw things for any reason. Be sure you push in your chair when you get up from it, so that it does not trip fellow workers.
4. Follow all safety procedures and instructions given to you by Ms. Hanson for using tools and materials. Many electronic and other items we use in this class can be easily damaged or broken if not cared for properly. If you damage or break an item on purpose or due to careless misuse, you and your family will be asked to pay the item's value for replacement purposes. Pay close attention to what you are doing.
5. Be courteous and respectful to all others including your partners, other teams, and your instructor. Watch your volume level, what you say and how you say it. Work cooperatively to get the most work done. Teamwork!
6. Stay on task. Stay focused! You must complete your work within the time allowed. Being off task will cause you, your team, and other students to get behind.
7. If you need assistance, do not yell for your instructor! Patiently raise your hand or the help signal and keep working on the problem until your instructor gets to you. Yelling is rude and will make you last! Do not get up and wander around. Do not come to Ms. Hanson unless she asks you to, she will come to you.
8. Computers are an important tool for us. Do not change any desktop settings, or go into places you should not be on the computer without permission. As with all electrical equipment be careful of cords and do not get any liquids (including water) near them.
9. No food, candy or drinks are allowed in the computer lab, and only water in a securely closable, clear, plastic bottle in the classroom.
10. Keep work stations neat and free of clutter (this includes the floor area.) Be sure to bring your writing utensil, planner and folder to class every day. You will not be allowed to go to your locker if unprepared. Do not touch other students belongings or projects for any reason without their permission or the instructor's

permission.

11. Always clean up and return equipment to its proper storage place. Do not play with tools or materials you are not assigned to use. At the end of the period be sure your team cleans up and wait seated quietly at your table until the instructor dismisses you. If asked to clean something up, do it! Place projects on the proper storage shelves as you clean up.

13. **Never run, push, or horseplay** in the PLTW room and computer lab. Not even just playing around! This is very dangerous.

### Automation & Robotics

Date \_\_\_\_\_

I have read the course syllabus and safety contract and am aware of the class expectations for myself.

Print Student Name: \_\_\_\_\_ Grade \_\_\_\_\_

Student Signature: \_\_\_\_\_

I have read the course syllabus and safety contract and am aware of the class expectations for my child. I understand my child is to have a binder or folder for class by **3/6/2020**.

Print Parent/Guardian Name: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

Please add my email to receive Google Classroom updates \_\_\_\_\_

Please check if you prefer your child's image **NOT** appear on the

☐ WMS\_STEM Twitter feed

While the focus is to show off student work, many students like to pose with their projects.

