

Seventh Grade Technology Education Information for Students and Parents

Course Description:

The seventh grade Technology Education curriculum is an introductory course designed to provide students with the basic principle relating to production technology, which includes construction, manufacturing, and materials. Through the process of making a pine sconce, the students will use the jigsaw, spindle sander, belt sander, band saw, miter saw, and disc sander to create the various parts of their project. Additionally, sheet metal skills will be used to make a tin reflector, candle cup, and trim ring for their sconce

Specific Skills or Knowledge Students Will Learn:

- How to use the technological design process
- How to use tools and machines safely and efficiently
- The basic design principle of making a project
- The three methods of manufacturing; handwork, machine work, and assembly line

Grading:

Safety Assessment – Successful completion of all safety assessments is required before using potentially dangerous equipment including but not limited to: cutting blades, hand tools, power tools and equipment and presses.

Quizzes – 30% of your grade will be from short quizzes

Class Participation – 30% of your final grade will be from participation

- Every student should participate daily. Participation will vary and include listening to lectures, working in groups, and building projects. Students are expected to be cooperative, work on the class's task and be respectful and not disruptive during class and participation
- Points are deducted for not following school rules, class rules, or Lab Rules and Machine Safety Rules.

Projects – 40% of your grade will be from the evaluation of the sconce

Daily Required Materials:

In order to be successful in class, students should bring the following items everyday:

1. Pen or pencil (preferred)
2. Technology notebook
3. Any work which was completed at home or during a former class
4. Assignment book – no passes will be issued without your assignment book

Attendance: What should I do when I return from an absence?

- Check with Mr. Schmell to find out what assignments you missed.
- If you are absent on the day of a quiz please see Mr. Schmell as soon as you return so that you can schedule a time to make up the quiz.
- Quizzes not made up by the end of the art cycle will become 0's.
- The process of making the sconce follows a series of steps. If you are absent on the day of a demonstration or missed some work periods, it may be necessary for you to come to the Tech Ed Lab during eighth period or possibly after school.
- Do not wait until the end of the art cycle to try to catch up, make up the missed work as soon as possible.

- If your project is not completed at the end of the art cycle you have one week to finish it. After one week your grade will be calculated as is. *It is your responsibility to see Mr. Schmell to set up extra time to complete unfinished work.*

Please be on time to class. Students who arrive more than five minutes after the class begins will be marked late. *If a teacher keeps you late, please get a pass.*

Extra Help:

I am usually available for extra help two or more days during eighth period every week. If these times are not convenient, it is your responsibility to talk to me to make other arrangements.

I am looking forward to a happy and productive school year and I am excited about the opportunity to get to know you. Please read the lab and safety rules, safety pledge, and sign, and return it. School policy dictates that each student must return the PARENT SUBMISSION LETTER before he or she can start his or her project. Notes are not an acceptable substitute. If you lose your letter, see Mr. Schmell for a new copy.

Parents if you have any questions or concerns or if you would like to visit my classroom, schedule a conference, or volunteer to help, you can contact me at 610-869-3022 ext. 3095 or e-mail me at Mschmell@avongrove.org

Technology Education Lab Rules

1. As you come into our class, put your books on the shelves and sit in your seat quietly. Class will not start until all are quiet. Bring a notebook and pen or pencil to class everyday.
2. Be polite at all times. Treat fellow classmates, the teacher, and their possessions with respect. Do your own work and make good use of the class time.
3. Horseplay and other inappropriate behavior are not allowed in the Technology Education Lab.
4. All tools and equipment are to be used with care and returned to the tool cabinet when you are finished with them.
5. Keep our lab neat. The floors should be free of paper, tools, and scrap wood.
6. State law requires that safety glasses be worn while working in the lab.
7. Make sure your project is in the locker at the end of the class. Projects left out might not be there when you return to class. Do not take projects home until they have been graded.
8. If you have a question or problem do not yell for the teacher. Go over to him or raise your hand. Do not ask questions about your project after clean up has started.
9. Work safely at all times. Accidents are typically caused by lack of knowledge or not paying attention. If you are not sure ask a question. When working always concentrate on what you are doing.
10. Only operate the machines and tools that you have permission to use. Do not play or tamper with the equipment or machines.
11. At clean-up, place your project in your locker, return your safety glasses to the cabinet, and do your clean-up job.

Machine Safety Rules

1. Remove all jewelry, eliminate loose clothing, and tie back long hair before operating any machine.
2. Check the condition of blades, belts, or cutters. See the teacher to fix the machine properly.
3. Adjust the guides and guards to the proper position. All adjustments should be made with the power off.
 - Band saw guide should be positioned 1/8" above the work piece.
 - Scroll saw guide should be touching the work piece.
 - Belt sander table should be positioned 1/16" away from the sanding belt.
 - Disc sander table should be positioned 1/16" away from the sanding disc.
4. When using the drill press:
 - The long end of the wood should be to the left of the user.
 - All materials must be clamped down to the table.
 - The key must be removed from the chuck before turning it on.
 - Turn the power off if the piece gets caught in the drill. Do not stop by hand.
5. Know the work area of the machine and keep your hands out of this area when the machine is in motion.
6. Use slow controlled motions when moving your piece in the machine. Fast jerky motions can be dangerous.
7. Do not talk to or distract an individual while they are using a machine or tool.
8. Never leave a machine until it has come to a complete stop.
9. Clean the machine before and after you use it. Never clean the machine or remove scraps from the machine until it has stopped.

Avon Grove School District

Fred S. Engle Middle School
Technology Education
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Dear Parent or Guardian:

_____ is enrolled in the Technology Education Program and will have the opportunity to operate various tools and power equipment.

It is understood that each student will be given proper instruction in the use of the equipment and in correct safety procedures concerning it, before being allowed to operate it himself/herself. The student must assume responsibility for following safe practices, and we therefore ask that he or she subscribe to the following safety pledge:

- Follow the teacher’s safety instructions at all times. Do not behave unsafely in the technology room, lab area or around any tools or equipment.
- Pay close attention to what you are doing at all times. Do not let others distract you while you are using any tools or equipment.
- Always wear safety glasses and other eye protection when you are in the lab.
- Never use any tool or equipment without the permission of your teacher. Do not use a tool unless the teacher has instructed you in its use. Do not follow the advice of anyone other than the teacher when using tools or equipment. Remember to ask the teacher for help if you are not sure about an operational procedure.
- Do not wear loose clothing, jewelry or other items that could be caught in a tool or machine.
- Always use guards on each machine. Keep hands and fingers away from all moving parts of tools and equipment and keep hands and fingers away from all blades, belts, or cutters.
- Report all injuries to your teacher at once.

I have read, fully understand and agree to follow the safety guidelines listed above.

Student’s Signature _____ **Date** _____

I hereby give my consent to allow my child to operate all tools and equipment in carrying out the requirements of the course in which he/she is enrolled.

Parent /Guardian Signature _____ **Date** _____

Please identify any health problems that may have a bearing on your child’s participation in this class. Even if this problem has already been reported to the nurse.

PLEASE RETURN THIS LETTER BY _____ OR RECEIVE A DETENTION