

7th Grade Exploratory Technology
Pathfinder Middle School
Room 425

Course Description:

Exploratory Tech is a class designed to introduce different aspects of technology and how it is put to real world use. Technology Education integrates skills from other content areas such as math, science, and language arts with the knowledge and skills unique to this content. As an example, at the middle school level measuring, calculating, and estimating are used with other math skills to develop and evaluate products. Science principles and applications are used in the research, design, and development of products. Language Arts skills are used to research and document the results of projects and products. Reading skills are used to interpret the instructions used to perform tasks or assignments.

Instructor: Mr. Sadowski
School Phone: 810-225-5276
Email: jsadowski@pcs.k12.mi.us

Course Objectives:

1. Students will demonstrate an understanding of basic engineering concepts to design and create various projects.
2. Students will understand the concept of technology and its importance in extending human capabilities.
3. Students will demonstrate the ability to measure and use a ruler or other measuring device.
4. Students will demonstrate a basic understanding of the laws of physics and their affect on moving objects.
5. Students will work cooperatively together in a group and will contribute to the group process with ideas, suggestions, and efforts.
6. Students will demonstrate good organizational and time management skills by allocating their time properly and meeting deadlines.
7. Students will make decisions and solve problems by specifying goals and implementing plans of action to produce a working result.

Course Sections:

This course is divided into four (4) main technology areas of concentration. **The project/assignments must be completed in order to proceed to the next unit.**

1. Drafting (**Complete 6 Drawings**)
2. Structural Engineering (**Complete Bridge Project**)
3. Physics-Laws of Motion (**Complete Mousetrap Car**)
4. Communication-Problem Solving

Grades:

Your final grade in this course will be derived from a number of different assignments. Each concentration area has written assignments that must be completed. Each concentration area also has an in class project that must be created using what you have learned from the in class assignments. (Point totals are approximations.)

Concentration Area Projects: 3 @ 100 points each

Concentration Area Assignments: 3 @ 20 points each

Classroom Rules:

1. Come to class on time and prepared to work.
2. Be respectful to the instructor, as well as your fellow classmates. Keep hands, feet, and objects to yourself.
3. Be quiet during instructional time and while working.
4. Stay away from behind Mr. Sadowski's desk, and do not touch anything in or on top of any of his desks unless instructed to do so.
5. Horseplay will not be tolerated- There is some equipment in the lab that could harm you or someone else if the proper behavior is not displayed.
6. Do not leave the room at any time unless given permission.
7. If you have questions, wait your turn and do not interrupt anyone else trying to get help. Simply wait until that persons question has been answered.
8. The pass will be given out to each student once a quarter.
9. There is no food, gum or candy allowed in the class at any time.
10. No one will be allowed to leave the class until everyone is in their seat and all materials and equipment is put away. Leave this class the way you find it.

Consequences:

If any of the fore mentioned rules are broken the following will happen:

1st offence: Verbal warning

2nd offence: Loss of participation points for the day.

3rd offence: Lunch detention or office referral depending on severity.

Miscellaneous:

If a substitute teacher should be here in my place you are expected to be on your best behavior. If you name is left by a sub in a negative way, you will be subjected to disciplinary action.

I am available during various times during the day if you have any questions or concerns for me. If these times do not work for you, set up an appointment with me or email me.

7:15am-8:00am Monday through Friday

3:15pm-4: 45pm Monday through Friday

A lunch upon request

6th Hour prep

Late work will be accepted for reduced credit up to 5 days late, at a cost of 10 pts a day. So for example if you turn in a 100-point assignment 5 days late, the most you could get on it would be 50 points out of 100.

If you know you will be absent ahead of time let me know and I will give you any assignments ahead of time, or extra time will be given.