

\$\$\$ Manufacturing \$\$\$

Park High School Course Syllabus



Industrial Technology Dept.

Manufacturing

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School Year 2015-2016, Period 6 - Semester 1

Course Summary:

This course will expose students to the wonderful world of manufacturing. Through lab activities students will learn the elements of manufacturing; from the design and development of a product, through the production, to the marketing and selling of the product. Other aspects of the class will include advertising, packaging, profit and loss analyses, and teamwork. Students will also be involved in the actual manufacturing of valued based products, which will incorporate the use of various materials, tools, and equipment. This class offers the student the ability to make some money, while at the same time the opportunity to learn some life long skills.

Learning targets:

The following is a list of some of the topics that will be covered during the course of the semester:

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| What is Manufacturing? | - Students will learn about the manufacturing industry and the many career opportunities that exist in the industry. |
| Research & Development | - Students will go through the process of developing products to be manufactured, and also through the research process to determine if the products will sell, what the target market would be, cost of production, and other variables that need to be considered. |
| Production Techniques | - Students will utilize various production techniques and methods to manufacture their products. These will include everything from separating to fabrication to finishing a wide range of materials, as well as the development and utilization of jigs, templates, and fixtures . |
| Tool and Machine Use | - Students will use a wide variety of tools, machines, and resources to help design, and build the manufactured products.
❖ Safety and proper maintenance of tools will be emphasized. |
| Marketing | - Students will utilize various marketing strategies to sell and distribute their products. Everything from packaging to advertising will be discussed, and implemented throughout the class. |

Class Activities:

This is primarily a “hands-on” class where most of the information and skills taught will then be reinforced through some sort of lab based activity or experience. Students will be involved in the manufacturing process from design to production to marketing. They will produce various products individually, in groups, and as a class, most of which will then be sold using various methods. Each student will have the opportunity to make a certain amount of money through the sale of the products produced. Advanced tool skills and manufacturing techniques will be emphasized

Student Expectations:

My personal educational philosophy centers around the notion that the more students experience, the more involvement they have in any aspect of life, the more they learn. Knowledge comes from doing, no matter what it is we are doing. This being said, my main student expectation is that students honestly apply themselves in each of the many activities that we embark on with-in the class. This includes not only the hands-on applications, but also learning the content information taught during the application of each area of study.

The more we do, the more we learn.

Student materials needed daily:

Pencil, Paper, and a 3-ring binder



Class Evaluation:

Students’ grades will be determined from a combination of different sources including but not limited to:

Class work

Project Completion

Project Evaluations

Lab Participation (assessed weekly)

This is a lab based class which results in just a small amount of written homework for the student. A larger aspect of the student’s homework responsibility centers on the student researching and designing various products to produce, and obtaining the necessary resources needed to manufacture these products.

Strong participation in class is extremely important to not only the student’s grade, but more importantly to what the student potentially can learn through-out the course of the semester, as well as the amount of money the student can earn.

Idle hands lead to Idle minds.

Grading Scale:

97-100 A+	87-89 B+	77-79 C+	67-69 D+	0-59 F
94-96 A	84-86 B	74-76 C	64-66 D	
90-93 A-	80-83 B-	70-73 C-	60-63 D-	