Power Mechanics 9/10

Expectations

R-Respect yourself and others

E-Engage, be an active learner

S-Supplies, be prepared

P-Positive attitude

E-Enjoy learning the skills presented

C-Care for this classroom and the school

T-Think critically

Please come to class on time with a binder and pen, and be ready to work.

Have all electronic devices turned off and out of sight.

No food or drink allowed in the shop…NO EXCEPTIONS!

Complete and submit all assignments on time.

**Student Safety.**

It is of the utmost importance that students remain quite and py attention to all demonstrations.

Protective eyewear must be worn around all powertools.

All jewelry must be removed and long hair tied back.

Loose clothing my not be worn.

Open toed shoes are not allowed.

Report all accidents, injuries and damaged equipment to the teacher immediately.

Inappropriate or unsafe behavior will result in loss of shop privileges and or a referral to the office.

**Course Outline**

Power mechanics 9/10 studies the relationship between power production and the mechanics of translating that power into movement. We will begin with the study of human powered vessels (bicycles) and finish up with small gasoline powered motors.

The course will be divided into 5 units

Unit 1- Safety- must be completed and safety test passed to work in the shop.

Unit 2- Tool and Fasterners 101. An introduction and demonstration of the tools and fasteners we will be using.

Unit 3- Measurement. Students will learn to accurately measure in both metric and imperial.

Unit 4 Bicycles- In this unit students will learn to completely disassemble and reassemble a bicycle. Skills concentrated on will be proper use of tools, lubrication and proper fastening techniques.

Unit 5- Small motors. The class will learn the principles and skills in tearing down and rebuilding a variety of small engines. Students will learn what the parts of the motors are and what their functions are. Proper techniques in the disassembly and reassembly will emphasized as well as the theory involved in each part of the workings of motors.

**Marks.**

Students will be marked on written assignments, tests, practical skills, and cleanup as follows.

Written work 20%

Tests 20%

Practical Skills 50%

Cleanup 10%