Chambersburg Area Senior High School

Department of Agricultural Education

## Small Engine Theory

**Course Instructor:** Ms. Walburn (tiara.walburn@casdonline.org)

**Textbook:** Radcliff, Bruce R,; Briggs & Stratton Small Engines. American Technical Publishers Inc. Homewood, IL. 1997.

**Course Description:**

In this course, students will study basic engine theory and operation. Student will explore career opportunities in small engine industry. Students will also practice disassembling & reassembling engines as well as develop shop management and organization skills. This course is a great introductory course for a career in engine design, fabrication, repair, and maintenance.

**Classroom Rules/Expectations:**  
 See “Agriculture’s Expectations and Procedures”

**Grading Policy:** Total points earned by you, the student, in the course will be divided by the points available in the course to calculate the student’s percentage grade. This course will follow the grade scale adopted by CASD. Grades will be based on weekly performances, projects, quizzes, and other forms of assessment. A cumulative final exam will be given in this course.

**Course Outline/Units:**

Unit 1: Engines & Careers in Small Engines

Unit 2: Safety in the Agricultural Shop / Small Engine Safety

Unit 3: Tool Identification

Unit 4: 4-cycle Engine Parts Identification

Unit 5: 2-cycle & 4 cycle Operation Theory

Unit 6: Engine Systems (Carburetion, Lubrication, Ignition, Governors)

Unit 7: Engine Maintenance & Troubleshooting *(Students are encouraged to bring in their own*

*small engines)*

**Items needed for class:**

* Pencil/Pen
* Folder (provided, but students may supply their own)
* Shop clothes (optional, there is a storage area for clothing)
* Approved safety glasses (provided, but student may supply their own)
* **Closed-toe shoes must be worn at ALL TIMES!!!**

**If you have any concerns and/or questions, or have a preferred way for me to contact you, please put the information below and bring back to the class.**

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Course: Small Engines