# **Exploration of welding 15S**

**Student Course Outline** 

Swan Valley Regional Secondary School Instructor- Mr. Hicks

#### **Course Objective:**

Upon Completion, the student should be able to identify the various use and handling of Hand tools and Power tools, processes used in welding and describe the safe operation of Oxy acetylene, Shielded Metal Arc Welding and Gas Metal Arc Welding (GMAW) also known as MIG. The course will include theory as well as shop experience. Welder's personal protective equipment and safety will be covered. The course is 30% Theory and 70% Practical.

### **Course Requirements**

P.P.E. – Safety Glasses, C.S.A Approved Steel toe boots and hearing protection must be worn at all times in the shop. **No exceptions.** 

## Cell Phone Policy

1st Time - Warning, Put phone away

2nd Time - Phone goes in lockbox + Phone call home.

3rd Time - Student brings their phone to the office, leave it there for the day. + Phone call home.

#### **Shop Rules and Polices**

Students Not following the safe work practices outlined in the school and division policies could result in removal from the course/program.

#### **Outline**

- A. Review of safe work practices, W.H.M.I.S, fire safety
- B. Personal Protective equipment (P.P.E)
- C. Oxy-Fuel Equipment
- D. Oxy-Fuel safety
- E. Oxy-Acetylene Welding
- F. Measuring devices
- G. Measuring Techniques
- H. Grinding techniques
- I. SMAW Safety
- J. SMAW machine maintenance
- K. Introduction to SMAW with 7018 Electrodes
- L. Welding Rods and their uses.
- M. GMAW in Flat and Fillets welds
- N. Welding wires for each process
- O. Cleaning of work areas.
- P. Attention will be given for attendance and punctuality
- Q. Above all working with others and fun.

# **Grading outline**

#### **Course Assessment-Marking Scale**

- Assignments are required to be handed in on time
- Students who are not excused from exams, tests and quizzes must consult with teacher immediately to arrange an alternate date to complete missed test/quiz or a zero or incomplete may be given.
- Rubric marking scales will be used in practical assessment process.

Classwork	35%
Demonstrations	25%
Tests	40%
Total	100%

<sup>\*\*\*</sup>Length and time of coverage per subject category may change without notice due to availability of time and resources\*\*\*