



## CROCUS PLAINS REGIONAL SECONDARY SCHOOL COURSE OUTLINE AND ASSESSMENT GUIDE

**Course Name:** WGB 20S Introduction to welding technology

**Teacher's Name:** Ms. Heather Bruederlin

**Contact Information:** [Bruederlin.heather@bsd.mb.ca](mailto:Bruederlin.heather@bsd.mb.ca) 204-729-3928

### **Course Description:**

This course is required to advance to the Senior 3 and 4 levels. Students taking this Arc (Level 1) course will be taught the basics about arc welding machines, alternating and direct currents, electrode identification, set up and welding of different joints in the flat and vertical positions. Students will be taught the use of a general purpose electrode on 12 gauge mild steel. Assigned projects will require the use of a variety of other shop power equipment. There will be opportunities for students to design and fabricate their own projects (if approved).

### **Units of Study**

Unit Title	Learning Outcomes	Assessment Plan	Proposed Time (Based on ~ 75 school days)
Written work	Arc Safety	<u>Formative Assessment</u> Assessment may include:	5 days
	Arc equipment	Questions and discussion about topics. Review of Smart Response questions during class time.	2 days
	Basic Electrodes		2 days
	Plasma Cutting		2 days
	Measurement		2 days
	Gas Metal Arc Welding		2 days
		<u>Summative Assessment</u>  Written tests for each unit.  15% of total mark	

Daily Practical Work	6013 Pad welds	<u>Formative Assessment</u> Assessment may include:	4 days
	7024 tee welds with start and stop	Feedback on each type of weld, what the student may need to try in order to improve their weld. Allows the student to understand what makes a good weld and asking them to assess their own welding abilities.	3 days
	7024 3 pass tee welds		3 days
	7024 lap		4 days
	6013 weave welds		3 days
	6013 down hand tee weld		4 days
	7018 lap weld with start and stop		3 days
	7018 3 pass tee		3 days
	7018 weave		4 days
	7018 up-hand weave		2 days
	Plasma cut MiG set-up and basic welds.		
		<u>Summative Assessment</u>  Students will be allowed to submit their best overall welds to be marked. 55% of overall mark.	

Employability Skills	<p>Communication skills</p> <p>Respectful workplace</p> <p>Adaptability and effort</p> <p>Follows direction and feedback</p> <p>Use of safety in the workplace</p>	<p><u>Formative Assessment</u></p> <p>Regular communications about shop expectations, and how to adapt to an employer's expectations.</p> <p><u>Summative Assessment</u></p> <p>Grading rubric will be used to assess skills necessary for employment expectations. 10% of total mark.</p>	Evaluated monthly and is graded on day to day skills.
Final shop project	<p>Multi Joint Assembly</p> <p>(A combination of practical welds done throughout the course, assessed at mid-term and course end)</p>	<p><u>Formative Assessment</u></p> <p>Provide feedback about appearance and fit up.</p>	10 days
		<p><u>Summative Assessment</u></p> <p>Rubric to grade on fit up, weld quality, appearance, and workmanship. 20% of total mark.</p>	

### Assessment Guidelines

There are various purposes for assessment:

- ☐ **Assessment *for* learning (formative assessment):** where assessment helps teachers gain insight into what students understand in order to plan and guide instruction, and provide helpful feedback to students.
- ☐ **Assessment *of* learning (summative assessment):** where assessment informs students, teachers and parents, as well as the broader educational community, of achievement at a certain point in time in order to celebrate success, plan interventions and support continued progress.

## **Academic Achievement**

**Grades will be calculated on summative assessment information only. The final calculation will be a fair reflection of a student's achievement of the learning outcomes.**

**Written Work..... \_\_25\_\_%**

**Practical Work..... \_\_50\_\_%**

**Employability Skills ..... \_\_5\_\_%**

**Final Testing..... \_\_20\_\_%**

- ☐ Provincial Standards Exam
- ☐ Final Exam
- ☐ Final Project/Assignment
- ☐ N/A

## **Learning Behaviours**

Assessment and reporting of learning behaviors will be according to the Brandon School Division Learning Behaviors Rubric.