



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

*Course Name: Advanced GMAW (MIG) Processes and Procedures 40S*

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### *Course Description:*

This course concentrates on improving the student's ability to weld with solid wire, flux cored wire, metal core wire, and aluminium wire. Students taking advanced gas metal arc welding will be taught about the equipment and safety concerns in a welding shop. Students will also weld five different weld joints in all positions, including V-butt welds in the flat and vertical positions.

*Text/Other Resources:*

### **Units of Study**

Unit Title	Learning Outcomes	Assessment Plan	Proposed Time (Based on ~ 90 school days)
Daily Progression Welds	Safety training	<u>Formative Assessment</u> Assessment may include:  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.	2 days
	Flat multi joint welds (5 required)		4 days
	Vert. down multi joint welds		4 days
	1 or 2 pass vert. Up lap		2 days
	2 pass vert tee		2 days
	2 pass OH lap		2 days
	3 pass O H tee		2 days
	Flat V-butt		10 days
	Vert v-butt		15 days
	2 pass Horizontal corners		4 days
	1 or 2 pass OH corner		4 days
	Flat solid wire CWB		10 days
	Horizontal solid wire CWB		7 days
	¼ Alum. Double V-butt bent.		4 days
	Torch cutting skills		ongoing
		<u>Summative Assessment</u>	
		Students will be allowed to submit their best overall welds to be marked. 50% 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.
Projects	<p>Candle holder project</p> <p>Skills project</p> <p>Junkyard war.</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>	<p>3 days</p> <p>5 days</p> <p>6 days</p>
Final testing	<p>Flat V-butt (mid-term)</p> <p>Flat CWB (final)</p>	<p><u>Formative Assessment</u></p> <p>Provide feedback about appearance and fit up.</p>	<p>2 days</p> <p>2 days</p>
		<p><u>Summative Assessment</u></p> <p>Rubric to grade on fit up, weld quality, appearance, and workmanship. 30% 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.**

**Term Work ..... 50 %**

**Employability skills..... 10 %**

**Projects..... 10 %**

**Final Assessment ..... 30 %**

- ☐ 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.