



CROCUS PLAINS REGIONAL SECONDARY SCHOOL COURSE OUTLINE AND ASSESSMENT GUIDE

Course Name: WGA 40S Advanced Shielded Metal Arc Welding Procedures

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Course Description:

This course concentrates on improving the student's ability to arc weld with both 7018 and 6010 welding rods. Students taking advanced Shield metal arc welding will be taught about the equipment and safety concerns in a welding shop, set up and welding of V-butt welds as well as Canadian Welding Bureau style testing. Students will be practicing out of position welds, programming lessons on a CNC plasma table, and various shop projects.

Units of Study

Unit Title	Learning Outcomes	Assessment Plan	Proposed Time (Based on ~ 90 school days)
Written Work	Safety training and hand signals Fractions and Decimals	<u>Formative Assessment</u> Assessment may include: Questions and quizzes to determine students' understanding. Smart response questions, and oral questioning. <u>Summative Assessment:</u> Final tests/ assignments for each unit.	2 days 3-4 days
Daily Progression Welds	6010 2 pass tee 7018 3 pass tee	<u>Formative Assessment</u> may include:	2 days 2 days

	Vert. corners, 6010 on outside, 7018 on inside	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 asks them to assess their own welding abilities.	2 days
	Skills practice project	<u>Summative Assessment</u>	3 days
	Vert. double V-butt 6010 (2 required)	Students will be allowed to submit their best overall welds to be marked.	3 days
	Flat V-butt 6010 root, 7018 fill and cap, bent (2 required)		3 days
	Horizontal V-butt 6010 root, 7018 fill and cap, bent (2 required)		10 days
	Vert. Up v-butt 6010 root, 7018 fill and cap, bent (2 required)		10 days
	SMAW CWB		
	CWB Torch Cut		3 days
	Plasma cam project		3 days

Project Work	CNC Hoodie Design	<u>Formative Assessment</u> may include:	3 days
	Sundial Skills Project	Feedback on each type of weld, what the student may need to try in order to improve their work. Allows the student to understand what makes a good project and asks them to assess their own fabricating abilities. <u>Summative Assessment</u> Students will submit their finished project to be marked.	4 days
Shop Maintenance Workplace Expectations	Adaptability and effort Follows direction and feedback Use of safety in the workplace Constructive Use of Shop Time Shop Maintenance	<u>Formative Assessment</u> Regular communications about shop expectations, and how to adapt to an employer's expectations. <u>Summative Assessment</u> Grading rubric will be used to assess skills	Evaluated monthly and graded on day-to-day skills.
Final testing	Flat V-butt Multi Joint style test	<u>Formative Assessment</u> Provide feedback about appearance and fit up. <u>Summative Assessment</u> Rubric to grade on fit up, weld quality and appearance.	3-4 days 3-4 days

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 15% Practical Work 35%
Projects 10% Final Assessment 30%
Shop Maintenance/ Workplace expectations 10%

Learning Behaviours

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