CROCUS PLAINS REGIONAL SECONDARY SCHOOL
COURSE OUTLINE AND ASSESSMENT GUIDE

Course Name: WGA 30S METAL DESIGN/ FABRICATION &OXY-ACETYLENE PROCEDURES

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Course Description:

This course is required to advance to the 4 level. Students taking basic oxy/acetylene welding will be taught about the equipment, safety concerns in a welding shop, the use of hand and power tools, oxy/acetylene cutting, sheer cutting operations, set up and welding of Lap, Tee, Corner, and Butt joints. They will also learn about braze welding material in the flat, vertical, and overhead positions. Students will be assigned projects and may 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	Oxy-fuel Safety	Formative Assessment Assessment may include:	5 days
	Oxy-fuel Equipment	Questions and discussion about topics.	2 days
	Oxy-fuel Cutting	Review of Smart Response questions during class time.	2 days
	Basic joints and weld types		3 days
	Braze Welding Daily Attendance	Summative Assessment Written tests for each unit. 15% of total mark	2 days

Unit Title	Learning Outcomes	Assessment Plan	Proposed Time (Based on ~ 75 school days)
Daily Practical Work	Lap weld with filler	<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.	4 days
	Corner weld with filler		3 days
	Tee weld with filler		4 days
	Butt weld with filler		4 days
	Vertical lap weld		4 days
	Horizontal Butt weld		4 days
	Flat braze weld		3 days
	Oxy-fuel cut		3 days
		<u>Summative Assessment</u> Students will be allowed to submit their best overall welds to be marked. 40% of overall mark.	

Projects	Assigned shop projects	Formative Assessment Feedback on following instructions, use of cutting equipment, and finishing techniques. Summative Assessment Students will be assessed on how well they have followed instructions, fit up, welding ability and finished product. 20% of overall mark	
Employability Skills	Communication skills Respectful workplace Adaptability and effort Follows direction and feedback Use of safety in the workplace	Formative Assessment Regular communications about shop expectations, and how to adapt to an employer's expectations. Summative Assessment Grading rubric will be used to assess skills necessary for employment expectations. 5% of total mark.	Evaluated monthly and is graded on day to day skills.
Final shop project	Multi Joint Assembly (A combination of practical welds done throughout the course, assessed at mid-term and course end)	Formative Assessment Provide feedback about appearance and fit up.	10 days

		Summative Assessment Rubric to grade on fit up, weld quality, appearance, and workmanship. 20% of total mark.	

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 ..... ___80__%

Final Assessment ..... ___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.