



**DEPARTMENT OF Pre-Employment Welding**

**COURSE OUTLINE – FALL 2010**

S.M.A.W. Theory – IT W16

**INSTRUCTOR:** Cindy Nychka

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**OFFICE**

**HOURS:** [Click here to enter text.](#)

**PREREQUISITE(S)/COREQUISITE:** N/A

**REQUIRED TEXT/RESOURCE MATERIALS:**

First Period Modules, The Metals Trades Handbook, Metals & How to Weld Them.

**CALENDAR DESCRIPTION:**

This course covers the S.M.A.W. theory components of Alberta Apprenticeship Welder Training, 1<sup>st</sup> Period. Topics include: arc welding machines, selecting and installing welding machines, maintenance of welding machines, accessories for welding machines, basic electricity, machine controls, mild steel arc welding electrodes, basic joints, types of welds, welding symbols, and weld faults.

**CREDIT/CONTACT HOURS:** 24 hours – 2 credits

**DELIVERY MODE(S):** GPRC or Fairview Campuses

## OBJECTIVES:

To ensure student is knowledgeable and competent in the following topics: arc welding machines, selecting and installing welding machines, maintenance of welding machines, accessories for welding machines, basic electricity, machine controls, mild steel arc welding electrodes, basic joints, types of welds, welding symbols, and weld faults.

## TRANSFERABILITY:

N/A

## GRADING CRITERIA:

Projects Evaluated Include:  
Cutting (OAC)  
1G Flat Butt Weld GMAW  
3G Vertical Butt Weld GMAW  
3F Vertical Lap Braze OAW  
3G Vertical Butt Weld GMAW  
2F Horizontal Lap Weld GMAW  
3F Vertical Lap Weld FCAW  
1G Flat Butt Weld SMAW  
2F Horizontal Lap Weld SMAW  
3F Vertical Lap Weld SMAW

-Attendance 20%, 2% per absence or late  
-Weekly Tests 20%  
-Final Exam 60%

## EXAMINATIONS:

### PERCENTAGE TO LETTER GRADE FOR COURSE

Percentage	Letter Grade (fixed)	Description (fixed to letter grade)	Grade Point Value (fixed to letter grade)
90-100	A+	Excellent	4.0
85-89	A	Excellent	4.0
80-84	A-	Excellent	3.7
77-79	B+	Good	3.3
73-76	B	Good	3.0
70-72	B-	Good	2.7
67-69	C+	Satisfactory	2.3
63-66	C	Satisfactory	2.0
60-62	C-	Satisfactory	1.7
55-59	D+	Marginal	1.3
50-54	D	Marginal	1.0
0-49	F	Fail	0.0

## **STUDENT RESPONSIBILITIES:**

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### **ATTENDANCE REQUIREMENTS (specific to course)**

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Lack of regular attendance will have a bearing on student evaluation. Regular attendance and punctuality in all courses is mandatory. Failure to maintain the necessary level of attendance may result in the offending student being withdrawn from the course. Certain unavoidable absences may be excused by the instructor. In such cases the student shall make every effort to inform the instructor prior to being absent. Absence from class must fall into the following categories to be excusable:

- Severe family or personal illness
- Bereavement
- Road/weather conditions
- Pre-arranged or pre-approved absence (to be approved PRIOR to absence)

Students who accumulate 30 hours of absence within the program will be placed on academic probation. If attendance continues to be a problem, program staff will consider action on a case by case basis. Late entry to class will be considered 1.5 hours late.

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### **Other Required Supplies:**

Approved protective clothing (footwear, coveralls, etc.), welders gloves, welder's hat or beanie, approved safety glasses, ear plugs, one calculator with square root functions and non-programmable, pencils and 2 3" binders.

### **STATEMENT ON PLAGIARISM AND CHEATING:**

Please refer to pages 49-50 of the College calendar regarding plagiarism, cheating and the resultant penalties. These are serious issues and will be dealt with severely.

### **COURSE SCHEDULE/TENTATIVE TIMELINE:**

2 hours per week for 12 weeks – August 30-November 17, 2010