

Pre Employment Welding



Candidate Guide



SASKATCHEWAN INSTITUTE OF
APPLIED SCIENCE AND TECHNOLOGY

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The Welding Certificate Program is dedicated to removing barriers and broadening the access to programs at SIAST. We believe that adults acquire knowledge and skills through life and work experience that may align with courses within our programs.

Developed by program	June 2008			
Revised by program				
Web ready – PLAR office				

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Why consider a PLAR assessment?

PLAR refers to the combination of flexible ways of evaluating people's lifelong learning, both formal and informal against a set of established standards. You can receive academic credit for your relevant lifelong learning. The Welding program recognizes prior learning in a number of ways.

We recognize:

- Previous formal learning from an accredited training institution through transfer of credit.
- Previous informal learning or experiential learning through a comprehensive prior learning and recognition process.

What are the PLAR Options?

To be eligible for PLAR, an applicant must first register or already be registered as a SIAST student.

Option A: Individual Course Challenge

If you have two or more successful years experience in the Welding field, and have learned the skills and knowledge for **one or more** of the Welding courses, you may apply to be assessed for each applicable course.

Fees:

- There will be a charge for each individual course assessment.
- For a listing of the specific PLAR fees in the PLAR database, check the [PLAR database](#) or call SIAST and ask to speak to the PLAR advisor/counsellor assigned to the Welding program at: 1-866-467-4278 or 1-866-goSIAST.

How many courses can be challenged through PLAR in the Welding program?

Currently we have 11 out of 15 certificate courses with PLAR challenges available. There is no limit. You may challenge as many of these courses as you are able to prove prior skills and knowledge through assessment.

Which courses are PLAR-ready?

Certificate Program Profile		
Course	PLAR Challenge(s) available through program	PLAR Challenge(s) not available
Associated Studies course	See **Note Below	
SFTY 103 (Welding Safety)	X	
METL 100 (Metallurgy and Heat Treatment of Metals)		X
WELD 103 (Oxy-acetylene Welding)	X	
WELD 104 (Cutting Processes)	X	
WELD 105 (Gas Metal Arc Welding)	X	
WELD 106 (Gas Tungsten Arc Welding)	X	
WELD 107 (Shielded Metal Arc Welding Part 1)		X
WELD 108 (Shielded Metal Arc Welding Part 2)	X	
WELD 109 (Shielded Metal Arc Welding Part 3)	X	
PRNT 101 (Blueprint Interpretation)	X	
EQPT 103 (Fabrication Equipment)		X
PROJ 102 (Shop Projects)	X	
PRAC 184 (Work Experience [optional])		X
COMM 127 (Industry Communications)	X	
MATH 125 (Industrial Mathematics)	X	

**Note: Some courses common to multiple programs at SIAST (i.e. computers, communications, math, and sciences) are managed by Associated Studies Faculty. To see if the shared courses in your program are PLAR-ready, visit the "PLAR-ready Courses" link on the [PLAR homepage](#) for further details.

For assistance call SIAST and ask to speak to the PLAR advisor/[counselor](#) assigned to the Welding Program at: 1-866-467-4278 or 1-866-goSIAST.

Is PLAR available at any time of the year?

PLAR challenges are currently being offered when requested.

Is it *easier* to challenge a course through PLAR - OR - take the course?

Neither is easier. By using PLAR you may reduce the repetition of studying information that you already know. The PLAR process allows you to demonstrate knowledge you already have.

PLAR is not an easy way to certification, rather a “different” way to obtain certification. Your personal level of skill and experience will dictate which courses you choose to challenge. The self-audit section found later in this guide will help you decide if you have a good match of skill and knowledge for a specific course.

Methods of assessing prior learning

Assessment methods measure an individual’s learning against course learning outcomes. The assessment methods listed below are the ones most commonly used, but other forms of flexible assessment may be considered. These assessments may include one or a combination of the following assessment tools:

- Product Validation & Assessment
- Challenge Exam
- Standardized Tests
- Performance Evaluations (including skill demonstrations, role plays, clinical applications, case studies)
- Interviews and Oral Exams
- Equivalency (evaluations of learning from non-credit training providers)
- Evidence or Personal Documentation Files (providing evidence of learning from life and work experiences and accomplishments)

If I live out of town, do I have to travel to a main campus to do PLAR?

There will be times that you will need to meet with the program on campus. However, we will try to keep travel to a minimum.

What if I have a disability & need equity accommodations?

At SIAST, we understand that sometimes services must be provided to students in a variety of ways to achieve the goals of fair representation. Therefore, the range of services provided for Education Equity students is as diverse as the needs of those students. We strive for equity (not uniformity) and provide varied services for students with differing needs. If more information is required, please contact a SIAST counsellor at a campus closest to you or refer to the SIAST Web site:

<http://www.siastr.sk.ca/siastr/servicesforstudents/>

Are there other methods to gain SIAST course credits for prior learning?

Transfer Credit

Yes, SIAST will grant credit for previous training that is similar in content, objectives, and evaluation standards to SIAST training. **Transfer of credit** is different from the PLAR process. Transfer Credit guidelines may be found at:

<http://www.siastr.sk.ca/siastr/admissions/transfercredit.htm>

It is the student's responsibility to check with [Registration Services](#) for specific campus procedures on this policy. For specific information and guidelines regarding transfer of credit, contact a SIAST educational counsellor.

Equivalency Credit

Equivalency credit refers to the application of credit you may have earned in a previously taken SIAST course to your current SIAST course. Apply at registration services for *equivalency credit*. This process should also be completed prior to your PLAR challenge. If these credits cannot be used for *equivalency credit*, you may use these accredited courses as part of your evidence for your PLAR challenge.

Contact us

If more information is required, please contact a designated PLAR counsellor at a campus closest to you.

Kelsey Campus, Saskatoon, SK
(306) 933-6445 or 1-866-467-4278

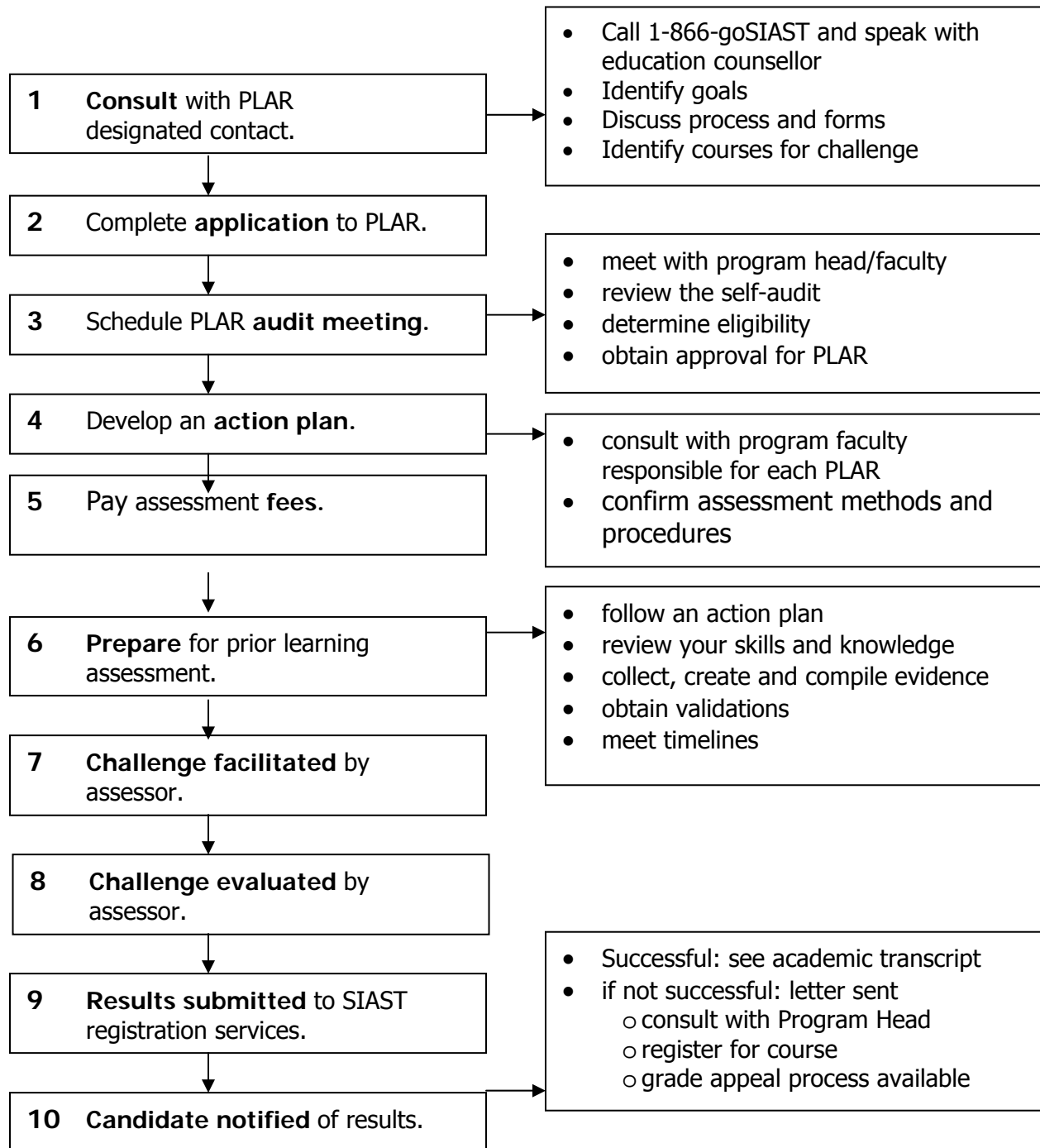
Palliser Campus, Moose Jaw, SK
(306) 694-3266 or 1-866-467-4278

Wascana Campus, Regina, SK
(306) 775-7430 or 1-866-467-4278

Woodland Campus, Prince Albert, SK
(306) 765-1611 or 1-866-467-4278

The PLAR process

Note: PLAR is available to individuals registered in a SIAST course or program, including unclassified students who seek course/block assessment or program level certification



Guiding principles for developing a PLAR evidence file

1. As you begin the PLAR process you will be advised if any evidence is required. This will be identified in your [action plan](#). Check with the PLAR designated contact **before** you begin to gather evidence.
2. Evidence must be valid and relevant. Your evidence must match the learning outcomes identified for each course.
 - a. It is your responsibility to create, collect and compile relevant evidence – if required.
3. Learning must be current. Within the last five years
4. The evidence should demonstrate the skills and knowledge from your experiences.
5. The learning must have both a theoretical and practical component.

Types of evidence

There are three types of evidence used to support your PLAR request:

1. Direct evidence – what you can demonstrate for yourself.
2. Indirect evidence – what others say or observe about you.
3. Self-evidence – what you say about your knowledge and experience.

Ensure that you provide full evidence to your Welding faculty assessor so that your prior learning application is assessed appropriately. Well organized, easy to track evidence will also ensure that none of the evidence is missed or assessed incorrectly.

Here are some examples of evidence that you may be requested to submit as part of your evidence file (if required):

- experience (activity) outlines
- workplace validations
- work samples
- photos of projects
- Photos of workplaces
- videotapes of projects/workplaces

All documents that are submitted to SIAST may be returned to the student after the final results have been given and the grade appeal deadline of seven days has passed. A copy of transcripts and certificates may be included in your evidence file, but be prepared to show original documents at the PLAR audit meeting for validation.

How long will it take to prepare evidence for PLAR?

Since the requirements are different for each course, and each candidate has different experiences, the amount of time it takes to prepare your evidence will vary.

Steps to complete a self-audit

1. Read through the Levels of Competence as listed below.

Levels of Competence:

Mastery: I am able to demonstrate the learning outcome well enough to teach it to someone else.

Competent: I can work independently to apply the learning outcome.

Functional: I need some assistance in using the outcome.

Learning: I am developing skills and knowledge for this area.

None: I have no experience with the outcome.

Learning Outcomes	Competency Level				
For each learning outcome listed, please self-evaluate your competency levels and record in the appropriate column	Mastery	Competent	Functional	Learning	None

2. Take a few minutes and read through the following self-audit for each course you are interested in as a PLAR candidate.
3. Check your level of competence as you read through each of the learning outcomes for each course. The information will help you in your decision to continue with your PLAR application.
4. In order to be successful in a PLAR assessment, your abilities must be at the competent or mastery level for the majority of the learning outcomes. Some things to consider when determining your level of competence are:

- How do I currently use this outcome?
- What previous training have I had in this outcome – Workshops, courses, on-the-job?
- What personal development or volunteer experience do I have in this area?

Be prepared to explain the reason you chose this level if asked by an assessor.

5. Bring the completed self-audit to a consultation meeting with the program head or faculty member in [step 3 – PLAR process](#) of the Candidate Process for Prior Learning Assessment.

Self-audit Guide(s)

COMM 127 – Industry Communications

Practice job-related interpersonal, oral and written communication skills. Use job search skills.

COMM 127 – Industry Communications Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Use job search skills					
• Write resume and cover letter					
• Practice skills required in job interviews					
2. Apply job-related interpersonal and oral communications					
• Listen actively					
• Speak effectively					
• Use teamwork skills and behaviours					
• Use teamwork skills and behaviours					
3. Apply job-related written communication					
• Write faxes					
• Write memo of instruction					
• Write emails					
• Complete order forms					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence File – the evidence file will include items such employer validation letter, forms and work orders, memo of instruction, current resume, Letter of application, and letter from your employer indicating positive interview skills.

AND/OR

2. Customer Role Play

AND/OR

3. Written Exam – 60% pass mark

MATH 125 – Industrial Mathematics

After reviewing basic mathematics, you will receive an introduction to mathematical concepts that support applications made in machine shop work.

MATH 125 – Industrial Mathematics Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Use Basic Mathematics					
•Use whole numbers					
•Use fractions					
• Use decimals					
•Use fractions and decimals					
• Use percent					
• Calculate powers and roots of numbers					
2. Use Basic Algebra					
• Use equations, for example, solve $12x + 8 = 5x + 29$; solve $x^2 + 16 = 40$					
• Calculate ratios, for example, find the amount of copper and tin in 400 kg of an alloy if the ratio of copper to tin is 9:5.					
• Calculate proportions, for example, find the time it will take 4 people to complete a certain job if 6 people can finish it in 5 hours.					
3. Use Imperial Measurement System					
• Employ imperial length conversions, for example, change 4' 7 1/2 " to feet					
• Employ imperial area and volume conversions, for example, change 60 ft ³ to yd ³					
• Interpret imperial measuring devices. Read and measure with an imperial tape measure.					
4. Use SI Metric Measurement System					
• Describe metric system, for example, what is a centimetre?					
• Employ SI metric conversions, for example, change 2 m 36 mm to mm					
• Interpret SI measuring devices. Read and measure with a metric tape measure.					
5. Calculate Area and Volume					

MATH 125 – Industrial Mathematics Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
<ul style="list-style-type: none"> • Calculate perimeters. This includes rectangles, circles, and any shape made up of straight lines and/or semicircles. 					
<ul style="list-style-type: none"> • Calculate area. This includes rectangles, parallelograms, triangles, circles, and shapes that are a combination of these. 					
<ul style="list-style-type: none"> • Calculate volume. This includes rectangular solids and cylinders. 					
6. Perform Trade Calculations					
<ul style="list-style-type: none"> • Calculate areas of eccentric shapes. This includes trapezoids and semi-circular-sided shapes. 					
<ul style="list-style-type: none"> • Calculate combined surface areas. This includes rectangular solids, cylinders, trapezoid solids, and semi-circular-sided solids. 					
<ul style="list-style-type: none"> • Calculate volumes of eccentric shapes. This includes trapezoid solids, semi-circular-sided solids, cones, spheres, and combination shapes. 					
<ul style="list-style-type: none"> • Describe angular systems of measurement. This includes converting between decimal degrees and degree-minute-seconds, and converting between degrees and fraction of a circle, for example, find the number of degrees in $\frac{5}{8}$ of a circle. 					
<ul style="list-style-type: none"> • Use protractors. 					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

Challenge Test

- Passing mark is 60%
- a scientific calculator is allowed
- A formula sheet is included which has perimeter, area, and volume formulas for rectangles, triangles, trapezoids, circles, and semi-circular-sided shapes, and volume of cones and spheres.
- The test consists of 42 questions: 14 multiple choice and 28 calculation questions. Percentage of questions per learning outcome: LO1 24%, LO2 14%, LO3 10%, LO4 11%, LO5 24%, LO6 17%.

Example: The outside diameter of a pipe is 2.8 cm and the thickness of the pipe is 2

mm. The inside diameter of the pipe is

- (a) 2.6 cm
- (b) 2.4 cm
- (c) 2.2 cm
- (d) 0.8 cm

Correct answer is (b) 2.4 cm

Example: Find the volume of a sphere 1.6 m in diameter.

Correct Answer: 2.14 m²

$$A = \frac{4}{3} \pi r^3$$

$$A = \frac{4}{3} (3.14)(0.8)^3$$

$$A = 7.39 \text{ m}^2$$

Resources

1. Welding Math 125 Industrial Mathematics, SIAST
2. *Practical Problems in Mathematics for Welders*, 4th Edition, Schell, Delmar Publishers (a division of Thomson Learning), Albany NY, 1996
3. Any text book that covers basic mathematics, basic algebra, and basic geometry.

SFTY 103 – Welding Safety

NOTE: Additions to the Learning Outcomes have been provided for clarification to the candidate.

SFTY 103 – Welding Safety Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Describe Fire-fighting equipment and procedures					
a. Describe the types of extinguishers and their application, types of fires and fire prevention strategies.					
2. Prepare work area for welding operations					
a.					
3. Transport Welding supplies					
4. Store Welding supplies					
5. Select protective equipment					
6. Perform Emergency First Aid					
7. Perform Lay Rescuer Adult CPR					
8. Practice Welding Shop Housekeeping					
9. Describe WHMIS					
10. Describe Occupational Health and Safety (as this applies to welding situations in Canada)					
11. Apply Rigging Techniques. Equipment knots...safety					

Highlighted outcomes require proof of current, valid certification.

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

Evidence File – If the candidate has significant experience in welding they may be able to produce evidence to support their challenge

- Letters of validation from employers
- Industry certification tickets (WHMIS, OHS, First Aid etc.)

Lab Demonstration and/or Industry Validation – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.

Structured Interview – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Resources

1. SFTY 103 Course Manual
2. Metal Trades Handbook

PRNT 101 – Blueprint Interpretation

PRNT 101 – Blueprint Interpretation Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Develop Working Drawings					
2. Develop Blueprints					
3. Calculate Materials					
4. Interpret Welding Symbols					
5. Set up Weld Joints					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

Evidence File – If the candidate has significant experience in welding they may be able to produce evidence to support their challenge

- Pictures of blueprints they might have drawn (verified to support authenticity)
- samples of blueprints (verified to support authenticity)
- Letters of validation from employers
- Industry certification tickets

Structured Interview – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Lab Demonstration and/or Industry Validation – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned skills.

Resources

1. Blueprint Reading for Welders 7th edition (A. E. Bennett)

PROJ 102 – Shop Projects

PROJ 102 – Shop Projects Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Plan a project					
▪ Interpret blueprints.					
▪ Determine work sequence.					
▪ Calculate materials.					
2. Prepare materials.					
▪ Cut materials to size.					
▪ Prepare materials for required joints.					
3. Complete fabrication project.					
▪ Fit all materials					
▪ Tack weld all joints					
▪ Finish weld all required joints					
▪ Complete required finishing procedures					
▪ Clean entire work area					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

Evidence File : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge

- Pictures of various items they have built(verified to support authenticity)
- samples of welds (verified to support authenticity)
- Letters of validation from employers
-

Lab Demonstration and/or Industry Validation – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.

Structured Interview – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Notes: (*Hint: Be as specific as possible when defining the PLAR assessment methods.*)

WELD 103 – Oxy-acetylene Welding

WELD 103 – Oxy-acetylene Welding	Mastery	Competent	Functional	Learning	None
Mastery: I am able to demonstrate it well enough to teach it to someone else.					
Competent: I can work independently to apply the outcome.					
Functional: I need some assistance in using the outcome.					
Learning: I am developing skills and knowledge for this area.					
None: I have no experience with the outcome.					
1. Operate Oxygen/Acetylene Welding Equipment					
Note, not necessary if the candidate has completed WELD 103 LO1					
▪ Knowledge of equipment and safety					
▪ Assembly					
2. Select Filler rods					
3. Run Beads Without Filler Rod					
4. Run Beads With Filler Rod					
5. Fusion Weld Butt Joints					
6. Use Brazing Rods.					
7. Fusion Weld Pipe.					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

Evidence File : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge

- a. Pictures of various items they have built(verified to support authenticity)
- b. samples of welds (verified to support authenticity)
- c. Letters of validation from employers

Industry certification tickets (Pressure/CWB...)

Lab Demonstration and/or Industry Validation – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.

Structured Interview – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Resources

1. WELD 103 course Manual
2. Modern Welding Textbook

WELD 104 – Cutting Processes

WELD 104 – Cutting Processes	Mastery	Competent	Functional	Learning	None
Mastery: I am able to demonstrate it well enough to teach it to someone else.					
Competent: I can work independently to apply the outcome.					
Functional: I need some assistance in using the outcome.					
Learning: I am developing skills and knowledge for this area.					
None: I have no experience with the outcome.					
1. Learning Outcome 1 Operate Oxygen/Acetylene Cutting Equipment					
Note, not necessary if the candidate has completed WELD 103 LO1					
2. Cut Straight Lines and Bevels Freehand					
3. Cut Straight Lines and Bevels Using Guides					
4. Cut Shapes Freehand					
5. Use Circle cutting attachments					
6. Cut Gauge Material Freehand					
7. Cut Metal Using Plasma					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. Evidence File : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge
 - a. Pictures of various items they have built / cut (verified to support authenticity)
 - b. samples of cuts (verified to support authenticity)
 - c. Letters of validation from employers
 - d. Industry certification tickets (Pressure/CWB...)

Lab Demonstration and/or Industry Validation – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned cuts

Structured Interview – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Resources

1. WELD 104 course Manual
2. Modern Welding Textbook

WELD 105 – Gas Metal Arc Welding (GMAW)

WELD 105 – Gas Metal Arc Welding (GMAW) Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Set UP GMAW Equipment for Mild Steel Knowledge of the process, equipment, safety Filler wires and shielding gasses					
2. Select type of Metal Transfer					
3. Run Beads on Flat Position					
4. Perform Multi-pass Fillet Welds in Horizontal Position					
5. Perform Multi-pass Fillet Welds in Vertical Position					
6. Perform Multi-pass Fillet Welds in Flat Position					
7. Perform Multi-pass Butt Welds in Flat Position					
8. Perform Multi-pass Butt Welds in Vertical Position					
9. Set UP GMAW Equipment for Aluminum Welding					
10. Perform Multipass Fillet Welds on Aluminum in Horizontal Position					
11. Set Up Flux Core Equipment					
12. Run Beads with Flux Core					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Evidence File** : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge
 - a. Pictures of various items they have built(verified to support authenticity)
 - b. samples of welds (verified to support authenticity)
 - c. Letters of validation from employers
 - d. Industry certification tickets (Pressure/CWB...)
2. **Lab Demonstration and/or Industry Validation** – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.
3. **Structured Interview** – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Resources

1. WELD 105 Course Manual
Modern Welding Textbook

WELD 106 – Gas Tungsten Arc Welding (GTAW)

WELD 106 – Gas Tungsten Arc Welding (GTAW) Mastery: I am able to demonstrate it well enough to teach it to someone else. Competent: I can work independently to apply the outcome. Functional: I need some assistance in using the outcome. Learning: I am developing skills and knowledge for this area. None: I have no experience with the outcome.	Mastery	Competent	Functional	Learning	None
1. Set up GTAW Equipment for welding Steel and Aluminum Knowledge of Process, equipment, power sources, gasses and electrodes.					
2. Run Beads Without Filler Rod					
3. Run Beads in Flat Position With Filler Rod (Ferrous)					
4. Butt Weld Stainless Steel in Flat Position					
5. Run Beads in Flat Position With Filler Rod (Non ferrous)					
6. Butt Weld Aluminum in Flat Position					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Evidence File** : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge
 - a. Pictures of various items they have built(verified to support authenticity)
 - b. samples of welds (verified to support authenticity)
 - c. Letters of validation from employers
 - d. Industry certification tickets (Pressure/CWB...)
2. **Lab Demonstration and/or Industry Validation** – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.
3. **Structured Interview** – The candidate may be interviewed to orally test their knowledge of equipment, process and Tungsten and filler rod selection.

Resources

1. WELD 106 Course Manual
2. Modern Welding Textbook

WELD 108 – Shielded Metal Arc Welding Part 2

WELD 108 – Shielded Metal Arc Welding Part 2	Mastery	Competent	Functional	Learning	None
Mastery: I am able to demonstrate it well enough to teach it to someone else.					
Competent: I can work independently to apply the outcome.					
Functional: I need some assistance in using the outcome.					
Learning: I am developing skills and knowledge for this area.					
None: I have no experience with the outcome.					
1. Fillet Weld in Vertical Position					
2. Fillet Weld in Overhead Position					
3. Butt Weld in Flat Position					
4. Butt Weld in Vertical Position					
5. Lap weld					
6. Operate Air Arc Torch					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Evidence File** : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge
 - a. Pictures of various items they have built(verified to support authenticity)
 - b. samples of welds (verified to support authenticity)
 - c. Letters of validation from employers
 - d. Industry certification tickets (Pressure/CWB...)
2. **Lab Demonstration and/or Industry Validation** – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.
3. **Structured Interview** – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Resources

1. WELD 108 Course Manual
2. Modern Welding Textbook

WELD 109 – Shielded Metal Arc Welding Part 3

WELD 109 – Shielded Metal Arc Welding Part 3	Mastery	Competent	Functional	Learning	None
Mastery: I am able to demonstrate it well enough to teach it to someone else.					
Competent: I can work independently to apply the outcome.					
Functional: I need some assistance in using the outcome.					
Learning: I am developing skills and knowledge for this area.					
None: I have no experience with the outcome.					
1. Multi-pass Fillet Welds in Horizontal Position					
2. Multi-pass Fillet Welds in Vertical Position					
3. Multi-pass Butt Welds in Flat Position					
4. Multi-pass Butt Welds in Vertical Position					
5. Multi-pass Butt Welds in Horizontal Position					
6. Describe Cast Iron Welding Techniques					

PLAR Assessment Methods If you qualify for PLAR, you may be asked to demonstrate your learning in one or more of the following ways. Be prepared to discuss the expectations during a consultation meeting.

1. **Evidence File** : If the candidate has significant experience in welding they may be able to produce evidence to support their challenge
 - a. Pictures of various items they have built(verified to support authenticity)
 - b. samples of welds (verified to support authenticity)
 - c. Letters of validation from employers
 - d. Industry certification tickets (Pressure/CWB...)
2. **Lab Demonstration and/or Industry Validation** – Generally most candidates will be required to carry out performance test as outlined to demonstrate competence in the assigned welds.
3. **Structured Interview** – The candidate may be interviewed to orally test their knowledge of equipment, process and electrode selection.

Resources

1. WELD 109 Course Manual
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Frequently Asked Questions (FAQ's)

1.