

CONSTRUCTION TRADES DEPARTMENT

COURSE OUTLINE – Winter 2023

ITW14: Welding 1 Processes Practice – 3 (0-0-12) 144 Hours for 12 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:

Mandy Peever

OFFICE:

OFFICE HOURS:

PHONE:

E-MAIL:

CALENDAR DESCRIPTION: This course covers Wire Feed Processes and practical components of the Alberta Apprenticeship Welder Training, 1st Period.

PREREQUISITE(S)/COREQUISITE: Program admission requirements

REQUIRED TEXT/RESOURCE MATERIALS:

- CWB Pre-Employment Manual
- Certified Safety Glasses (CSA Standard Z94.3)
- Welding Helmet
- Gloves appropriate for shop work
- Coveralls or work clothes suitable for shop work
- Safety Footwear
- Leather Jacket or sleeves (recommended)

DELIVERY MODE(S): Lecture

COURSE OBJECTIVES: Upon successful completion of this course, students should be able to demonstrate knowledge and competency in wirefeed theory and practical application.

LEARNING OUTCOMES:

- Assemble oxyfuel equipment
- Perform oxyfuel cutting
- Cut and gouge using the plasma arc and carbon arc cutting processes
- Perform fillet and groove welds on mild steel
- Perform FCAW and MCAW operations in multiple positions
- Perform GMAW, FCAW and MCAW welds on mild steel
- Perform welds on aluminum
- Perform GMAW, FCAW and MCAW on mild steel pipe

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at the Alberta Transfer Guide main page <http://www.transferalberta.ca>.

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

GRADING CRITERIA: : A student must pass each course individually in order to receive a Certificate of Achievement in the Pre-Employment Welding Program. Absences for tests, or assignments missed, will result in a score of zero. No supplemental tests and/or examinations available.

Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**.

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100		C+	2.3	67-69
A	4.0	85-89		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

STUDENT RESPONSIBILITIES:

- Read and review welding program rules and regulations
- Students who do NOT comply with the rules and regulations will be asked to leave the program
- Purchase books, supplies and safety clothing as outlined by the instructor

- Read and complete assignments as outlined by the instructor
- Acquaint themselves with missed test announcements, worksheet assignments, theory concepts taught, and lab assignments presented
- Prearrange any missed time with instructor

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the Northwestern Polytechnic Calendar at <https://www.nwpolytech.ca/programs/calendar/> or the Student Rights and Responsibilities policy which can be found at <https://www.nwpolytech.ca/about/administration/policies/index.html>.

**Note: all Academic and Administrative policies are available on the same page.

Additional Information (Optional):

Instructors may add whatever they want here.