

DEPARTMENT OF TRANSPORTATION TRADES COURSE OUTLINE – FALL 2023, SEMESTER 1 AUGUST 28 – DECEMBER 15, 2022 MCM 150 V01_F23 SHOP I – 7 CREDITS 320 HOURS

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: Darcy Hudak **PHONE:** 780.835.6747

OFFICE: FM2 - 120 **E-MAIL:** dhudak@nwpolytech.ca

OFFICE HOURS: 9 AM to 4:00 PM

CALENDAR DESCRIPTION: Subjects include shop safety, hand tools, measuring tools, wheels and tires, brake system operation, basic electricity and lighting systems, carburetion, two-stroke tuning, four-stroke diagnostic and tuning, motorcycle assembly, PDI, storage procedures, inspection and maintenance, safe use of oxyacetylene welding equipment, recognition and interpretation of motorcycle parts.

PREREQUISITE(S)/COREQUISITE:

At least 16 years of age.

Meet the educational requirements for the trade:

English 10-1, English 10-2 or equivalent.

Math 10-C, Math 10-3 or equivalent.

Students should be aware that some employers may require a high school diploma as a prerequisite for employment. Mature students lacking the educational requirements may also be admitted with a successful Entrance Exam.

REQUIRED TEXT/RESOURCE MATERIALS:

Alberta Apprenticeship and Industry Training Individual Learning Modules Shop Procedures Package:

090101aA Communication – Part A 090101aB Communication – Part B

090101b Measuring Tools

090101c Specialty Hand Tools 090101d Fastening Devices

090101e Safety

150101n Hand Grinding Machines

1501010 Drilling Machines

190101f Oxy-Fuel Equipment, Heating and Cutting

Other Textbooks:

Modern Motorcycle Technology (text and workbook)

Edward ABDO - Delmar

Other Required Supplies:

- pencils •
- pens rubber gloves
- 3-ring binder (1") safety glasses (MANDATORY)
- notepad (for Shop use)
- Face shield

- smock/coverall (OPTIONAL)
- steel toe footwear (CSA approved highly recommended!)
- Skill/Task Sheets (provided by Instructor)
- Welding Gloves (MANDATORY)

Note: This list has been prepared for safe participation in a workshop environment.

It is a minimum guideline only.

Hearing protection will be available to students as required (from the tool room).

<u>Apprenticeship Prior Learning Assessment Fee</u>: \$150 fee for assessment to write 1st Year Apprenticeship Exam in Fall, 2023 term.

DELIVERY MODE(S): Workshop projects; procedures; instructor led; hands on.

Note: NWP reserves the right to change the course delivery.

COURSE OBJECTIVES:

The Pre-Employment Motorcycle Mechanic program has been developed to provide students with entry level skills in the motorcycle mechanic technologies and provide pre-apprenticeship opportunities for those who may be interested in pursuing apprenticeship.

Motorcycle Mechanic Training Goal

I. PROFICIENT

- A. A thorough competence derived from training and practice (skilled).
 - 1. COMPETENCE having suitable or adequate ability.
 - 2. ABILITY physical and/or mental power to perform.

Well advanced in an occupation or branch of knowledge.

II. OCCUPATION

A. An activity serving as one's regular employment.

III. PRACTICE

- A. To perform or work at repeatedly to become proficient (acquire skill).
 - 1. SKILL specialized knowledge and ability.
- B. To do repeated exercises for proficiency.
- C. To pursue a profession actively.
 - 1. PROFESSION occupation requiring advanced education.
- The goal of apprenticeship training is to develop a competent journeyman through a combination of on-the-job and technical training.

LEARNING OUTCOMES:

TRANSFERABILITY:

EVALUATIONS:

Areas of Evaluation	Percentage of Total Course Mark
Practical Tests	40%
Quality of Work	20%
Productivity	10%
Attitude Towards Daily Work	5%
Ability to Follow Instructions	5%
Daily Clean Up	5%
Professionalism	5%
Attendance	10%

GRADING CRITERIA:

Students must complete all required courses with a grade point of 2.0 or higher; a percentage of 63% or higher; a "C" letter grade or higher, and no failing grades. A student must pass each course individually in order to receive a Certificate of Achievement in Pre-Employment Motorcycle Mechanic.

Absence for tests or assignment missed will result in a score of zero.

A grade of less than 45% on a practical exam will result in an opportunity to retest at a mutually agreed time, within the original deadline. A 20% reduction will apply to all retests.

NORTHWESTERN POLYTECHNIC					
GRADING CONVERSION CHART					
Alpha Grade	4-point Equivalent	Percentage Guidelines	Designation		
A +	4.0	90 – 100	EXCELLENT		
A	4.0	85 – 89			
A-	3.7	80 – 84	FIRST CLASS STANDING		
B +	3.3	77 – 79			
В	3.0	73 – 76	GOOD		
В-	2.7	70 – 72			
C+	2.3	67 – 69	SATISFACTORY		
С	2.0	63 – 66			
C-	0.0	60 - 62	FAIL		
D ⁺	0.0	55 – 59			
D	0.0	50 - 54			
F	0.0	0 – 49			
WF	0.0	0	FAIL, withdrawal after the deadline		

COURSE SCHEDULE/TENTATIVE TIMELINE:

MCM 100/150

16 V	Weeks 30.0 Hours Per Week	480 Hours
Week 1	Orientation, Safety and Tools	
Week 2	Workshop Procedures and Liability	
Week 3	Parts Introduction	
Week 4	Tire Service	
Week 5	Wheel Inspection and Maintenance	
Week 6	Brake Inspection and Maintenance	
Week 7	Assembly, PDI and Storage	
Week 8	Practical Testing	
Week 9	Basic Electricity	
Week 10	Electric Circuits	
Week 11	4-Stroke Theory and 2-Stroke Theory	
Week 12	Carburetor Inspection and Maintenance	
Week 13	4-Stroke Diagnostics and Tune-Up	
Week 14	2-Stroke Diagnostics and Tune-Up	
Week 15	Introduction to Oxyacetylene Welding (Safety) – TBA	
Week 16	Review, Shop Wrap-Up and Final Exam	

STUDENT RESPONSIBILITIES:

Following the guidelines in "Student Rights and Responsibilities" in the NWP College calendar assist us all in maintaining an adult learning environment. Please refer to the Student Rights and Responsibilities policy in the Northwestern Polytechnic Calendar or at

www.nwpolytech.ca/downloads/documents/StudentRightsandResponsibilities.pdf.

PROFESSIONAL CONDUCT

Students are in a public facility and will be expected to act accordingly. This includes attitude towards others and refraining from use of offensive language. Everyone is entitled to experience a cordial environment. Remember, you are responsible for the attitude you bring to class every day!

NWP Fairview Campus property is public domain; therefore Alberta traffic rules and laws apply to all parking lots and roadways (enforced by R.C.M.P.).

NWP TRAINING UNITS ARE NOT TO BE RIDDEN AT ANY TIME!

<u>Helmet usage is mandatory</u>, and insurance and licensing requirements will be met by all students involved in operating powered vehicles.

ATTENDANCE

Lack of regular attendance <u>will</u> have a bearing on student evaluation. Regular attendance and punctuality in <u>all</u> courses are <u>mandatory</u>. Failure to maintain the necessary level of attendance <u>may</u> result in the student being <u>withdrawn</u> from the program.

Certain unavoidable absences <u>may</u> be excused by the instructor(s). In such cases the student shall make <u>every</u> effort to inform the instructor(s) <u>prior</u> to an absence. If this is not possible the student shall at the earliest opportunity (next regularly scheduled class) provide a descriptive note explaining the absence. Failing to provide a note or acceptable explanation at the beginning of the <u>next</u> attended class will result in an unauthorized absence. Any missed information is the student's responsibility!

Absence for tests or assignment missed will result in a score of zero.

Absence reporting is solely the student's responsibility!

Absenteeism is based on a percentage of the total hours of each program involving unauthorized absences. Please note that MCM 100/150 is one program and MCM 200/250 is another separate program

- 1. 2.5% of total hours: Student will be given a verbal warning by the Instructor (to be recorded).
- 2. 3.75% of total hours: Student will be advised in writing by the Program Leader or designate.
- 3. 5.0% of total hours: Student may be withdrawn from the program!

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):