



**DEPARTMENT OF AUTOMOTIVE SERVICE TECHNICIAN, PARTS  
TECHNICIAN & GENERAL MECHANICS**

**COURSE OUTLINE**

**PARTS AND MATERIALS PRE EMPLOYMENT CERTIFICATE - SEMESTER 1 (FALL)**

**PM 1100 MATERIAL HANDLING EQUIPMENT**

**12CREDITS (200 HOURS/16 WEEKS LECTURE)**

<b>INSTRUCTOR:</b>	Brian Carreau	<b>PHONE:</b>	780-835-6631 - Brian
	Craig Rode		780-835-6724 - Craig
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<b>OFFICE HOURS:</b>	Monday to Friday 8:00AM – 4:00PM		

**PREREQUISITE(S)/COREQUISITE:** English 20-1 or English 20-2 or equivalent

Math 20-1 or Math 20-2 or Math 20-3 or equivalent

A 20-level Science or equivalent

Although a high school diploma is not required for entrance to this program, students should be aware that some employers may require a High School Diploma as a prerequisite to employment.

Applicants who do not meet these requirements may be admitted to the program but they will be required to pass the Apprenticeship & Industry Training (AIT) Trades Entrance Exam during the first semester, if choosing to pursue an apprenticeship

**REQUIRED TEXT/RESOURCE MATERIALS:** Parts Technician 1<sup>st</sup> Period Apprenticeship ILM's. Students who have successfully completed the program and also completed an acceptable Alberta Apprenticeship Prior Learning Assessment Application (PLA) may have the opportunity to challenge the Alberta Apprenticeship and Industry Training first and second year Parts and/or Materials Technician apprentice exam. A fee is payable by the student to the Minister of Finance per PLA prior to challenging the exam.

**CALENDAR DESCRIPTION:** This theory course is an introduction to material handling equipment and parts identification; with a primary focus on electrical and hydraulic systems. The course will include the fundamentals of operation for major components on material handling equipment as well as identification of standard stock items, bearings, and seals. Measuring calculations and use of measuring tools will also be included.

**CREDIT/CONTACT HOURS:** 12 Credits – 200 Contact Hours – 12.5 hours per week

**DELIVERY MODE(S):** Instructor led classroom theory.

**OBJECTIVES (OPTIONAL):** The program has been developed to provide students with entry level skills as a Parts and/or Materials Technician. After obtaining requisite number of hours in the work force, the student would be eligible to continue with Alberta Apprenticeship and Industry training in the Parts Technician and/or Materials Technician trade towards journeyman certification.

**TRANSFERABILITY:** \*\* This course is non-transferrable."

**GRADING CRITERIA:** A grade of 63% or higher is required to obtain credit for this course. Students must complete all required courses with a grade point average of no less than 2.0 and no failing (F) grades.

GRANDE PRAIRIE REGIONAL COLLEGE			
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	
B	3.0	73 – 76	GOOD
B-	2.7	70 – 72	
C+	2.3	67 – 69	SATISFACTORY
C	2.0	63 – 66	
F	0.0	60 – 62	FAIL
F	0.0	55 – 59	
F	0.0	50 – 54	
F	0.0	0 – 49	
WF	0.0	0	FAIL, withdrawal after deadline

**EVALUATIONS:** Obtain credit with a mark of 63%. AIT pass mark is 70%.

Attendance is to GPRC standards. Final mark will be comprised of 40% quizzes and 60% final exam.

## **STUDENT RESPONSIBILITIES:**

Please refer to the Student Rights and Responsibilities policy in the Grande Prairie Regional College Calendar or at

[www.gprc.ab.ca/downloads/documents/StudentRightsandResponsibilities.pdf](http://www.gprc.ab.ca/downloads/documents/StudentRightsandResponsibilities.pdf)

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

Refer to the Student Conduct section of the College Admission Guide at

<http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at [www.gprc.ab.ca/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

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

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

### **MATERIAL HANDLING EQUIPMENT ..... 200 Hours**

Identify various types of material handling equipment such as forklifts, conveyers, cranes and storage equipment. *(111hrs.)*

Identify major components and state the function and operation of material handling equipment with a focus on hydraulic and electrical systems. *(46hrs.)*

Identification and use of measuring tools and perform measuring calculations. *(16hrs)*

Identify standard stock items and describe the function, application and design characteristics of bearings and seals. *(27hrs.)*