



**DEPARTMENT OF ELECTRICAL/MILLWRIGHT**

**COURSE OUTLINE – FALL 2012 – SEPTEMBER 4 – DECEMBER 21, 2012**

**MW102 MILLWRIGHT/MACHINIST SHOP – 10.5 CREDITS 176 HOURS**

**INSTRUCTOR:** Clinton Derocher

**PHONE:** 780-539-2701

**OFFICE:** TT130

**E-MAIL:** cderocher@gprc.ab.ca

**OFFICE HOURS:** 8:00 – 4:15

**PREREQUISITE(S)/COREQUISITE:** None

**REQUIRED TEXT/RESOURCE MATERIALS:** Alberta Apprenticeship and Industry Training Millwright/Machinist Individual Learning Modules First Year

**CALENDAR DESCRIPTION:** This course is designed to develop the student's skill of applying theoretical knowledge. Students will be required to demonstrate competency by using millwright & machinist equipment as each theoretical component is covered throughout the course. Safety will be emphasized.

**CREDIT/CONTACT HOURS:** 10.5 credits, 11 hours per week for 16 weeks

**DELIVERY MODE(S):** Instructor led; project based.

**OUTCOME:**

- **Measurement and Layout**
- **Benchwork**
- **Threads and Fasteners**
- **Grinders and Saws**
- **Machining**
- **Metallurgy**
- **Machine Alignment**
- **Rigging**

**TRANSFERABILITY: N/A**

**GRADING CRITERIA:**

<b>GRANDE PRAIRIE REGIONAL COLLEGE</b>			
<b>GRADING CONVERSION CHART</b>			
<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage Guidelines</b>	<b>Designation</b>
<b>A<sup>+</sup></b>	<b>4.0</b>	<b>90 – 100</b>	<b>EXCELLENT</b>
<b>A</b>	<b>4.0</b>	<b>85 – 89</b>	
<b>A<sup>-</sup></b>	<b>3.7</b>	<b>80 – 84</b>	<b>FIRST CLASS STANDING</b>
<b>B<sup>+</sup></b>	<b>3.3</b>	<b>77 – 79</b>	
<b>B</b>	<b>3.0</b>	<b>73 – 76</b>	<b>GOOD</b>
<b>B<sup>-</sup></b>	<b>2.7</b>	<b>70 – 72</b>	
<b>C<sup>+</sup></b>	<b>2.3</b>	<b>67 – 69</b>	<b>SATISFACTORY</b>
<b>C</b>	<b>2.0</b>	<b>63 – 66</b>	
<b>C<sup>-</sup></b>	<b>1.7</b>	<b>60 – 62</b>	
<b>D<sup>+</sup></b>	<b>1.3</b>	<b>55 – 59</b>	<b>MINIMAL PASS</b>
<b>D</b>	<b>1.0</b>	<b>50 – 54</b>	
<b>F</b>	<b>0.0</b>	<b>0 – 49</b>	<b>FAIL</b>
<b>WF</b>	<b>0.0</b>	<b>0</b>	<b>FAIL, withdrawal after the deadline</b>

**EVALUATIONS:**

Project #1 2.5%

Project #2 20%

Project #3 2.5%

Project #4 20%

Project #5 15%

Project #6 40%

**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).

#### **ATTENDANCE REQUIREMENTS:**

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.

#### **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: 11 hours per week for 16 weeks**

<b>PROJECT NAME</b>	<b>ALLOTTED TIME</b>
<b>Drill Bit Sharpening Exercise</b>	<b>12 Hrs.</b>
<b>Drill Gauge Project</b>	<b>32 Hrs.</b>
<b>High Speed Steel Tool Bit Project</b>	<b>12 Hrs.</b>
<b>Cannon Project</b>	<b>50 Hrs.</b>
<b>Rim &amp; Face Shaft Alignment Exercise</b>	<b>20 Hrs.</b>
<b>Rigging Exercise</b>	<b>4 Hrs.</b>
<b>Oxyacetylene Exercise</b>	<b>12 Hrs.</b>
<b>Metallurgy (Heat Treatment) Exercise</b>	<b>12 Hrs.</b>
<b>Laser Shaft Alignment</b>	<b>4 Hrs.</b>
<b>Gear Carrier Project</b>	<b>18 Hrs.</b>