DEPARTMENT OF ELECTRICAL/MILLWRIGHT

COURSE OUTLINE – FALL 2013 – SEPTEMBER 3 – DECEMBER 20, 2012

MW103 MILLWRIGHT/MACHINIST TRADE MATH – 4 CREDITS 64 HOURS

INSTRUCTOR: Ken McQuaig **PHONE:** 780-539-2729
OFFICE: TT126 **E-MAIL:** kmcquaig@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 integrates academic math with the job of a Millwright & Machinist. Emphasis will be placed on the application of mathematical calculations in the Millwright & Machinist industry. Topics to be included are: measurements, ratios, triangles and tables. The student will be expected to apply this knowledge when participating in shop activities.

CREDIT/CONTACT HOURS: 4 credits, 4 hours per week for 16 weeks

DELIVERY MODE(S): Instructor led classroom theory.

OUTCOME:

- **Perform mathematical operations with whole numbers**
- **Solve problems involving fractions**
- **Perform calculations, conversions and solve practical problems with decimal numbers**
- **Solve problems involving measurement and conversion using geometric formulas**
- **Solve problems involving percentage and ratios**
- **Solve problems involving special triangle and elementary trigonometry**
- **You will be able to recognize math symbols used in millwright trade calculations. You will also be able to select from a list, the correct formula for a specific problem solving application at your training level**

TRANSFERABILITY: N/A

GRADING CRITERIA:

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**	
C–	**1.7**	**60 – 62**	
D+	**1.3**	**55 – 59**	**MINIMAL PASS**
D	**1.0**	**50 – 54**	
F	**0.0**	**0 – 49**	**FAIL**
WF	**0.0**	**0**	**FAIL, withdrawal after the deadline**

EVALUATIONS:

Term Test #1 30%

Term Test #2 30%

Final Exam 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.

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/**

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

COURSE SCHEDULE/TENTATIVE TIMELINE: 4 hours per week for 16 weeks

WEEK	MODULE # & DESCRIPTION
1 & 2	Introduction 160110a Working with Whole Numbers
3 & 4	160110b Fractions 160110c Decimals
5 & 6	160110d Measurement & Conversion Term Test #1
7 & 8	160110d Measurement & Conversion 160110e Percentage, Ratio, graphs and tables
9 & 10	160110e Percentage, Ratio, graphs and tables Term Test #2
11 & 12	160110f Introduction to Triangles and Trigonometry
13 & 14	160110f Introduction to Triangles and Trigonometry Review
15 & 16	Review Final Exam