DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – FALL 2021

MA0110 (E2) - Mathematics Grade 10-C Equivalent - 5 (0-0-7.5) HS 112.5 Hours for 15 Weeks

Grande Prairie Regional College respectfully acknowledges that we are located on Treaty 8 territory, the traditional homeland and gathering place for many diverse Indigenous peoples. We are honoured to be on the ancestral lands of the Cree, Dene/Beaver and Métis, whose histories, languages, and cultures continue to influence our vibrant community. We are grateful to have the opportunity to work, learn, and live on this land.

INSTRUCTOR:	Reddy Ganta	**PHONE:**	(780) 539-2810 or 2850
OFFICE:	A205 or B301	**E-MAIL:**	Rganta@gprc.ab.ca
OFFICE HOURS:	TBA		

CALENDAR DESCRIPTION:

This is a modularized course which covers measurement including surface area and volume, introduction to trigonometry, numbers, roots, and exponents, polynomial multiplication and factoring, relations and functions, linear functions, and system of equations.

PREREQUISITE(S)/COREQUISITE:

MA0091 or equivalent math placement test score

REQUIRED TEXT/RESOURCE MATERIALS:

Text Book: Package of MA0110 modules, 2017;
Scientific calculator, loose leaf paper or note book; a pencil, an eraser, a geometry set.

DELIVERY MODE:

- This course is delivered remotely. There is no face- to- face or onsite requirement. Students must have a computer with a webcam, Printer/Scanner, and reliable internet connection. Technological support is available through helpdesk@gprc.ab.ca.

- MA0110 is a modularized math course divided into 8 separate units called modules. The instructions for each topic are given in the modules, followed by several examples and exercises. Study the instructions and work through the examples before starting each exercise. The answers for each exercise are given at the end of each module. Check your work often to make sure you understand each topic. The key to success in working with modules is to ask questions whenever you have difficulty understanding instructions, the examples, or the exercises. **Do not hesitate to ask for help.**

- All tests and exams MUST be written at the scheduled times (page 5).
- One lowest test mark out of 5 test marks will be ignored.

COURSE OBJECTIVES:

This course introduces students to:

- SI units and imperial units and their conversion
- real life problems, using SI and imperial units, that involve surface area and volume of complex figures
- primary trigonometric ratios and their use in real life situations
- general root of a number and its use in real life situation
- powers with integral and rational exponents and basic operations using the rules for order of operations
- the concept of factoring a polynomial expressions with two, three, and four terms
- the concept of relation and how to convey it, and explain if the relation is a function
- equation of a linear function and its graphing
- the concept of system of equation and how to solve it

LEARNING OUTCOMES:

As a result of taking this course, students will gain the ability to:

- Convert measurement between SI units and imperial units
- Solve problems, using SI and imperial units, that involve the surface area and volume of general and complex 3-D object
- Solve similar right triangles using proportions, trigonometric ratios, and/or Pythagorean theorem
- Calculate prime factors, greatest common factor, and /or nth root by applying in real life situations
- Simplify expressions with integral and rational exponents using the rules for order of operations
- Factor a polynomial expression using greatest common factor, product and sum, and/or difference of two squares
- Determine the domain and range of a relation, and prove if a relation is a function
- Determine the equation of a line if a graph, a point and the slope, two points, or slope and y-intercept is given
- Graph a linear functions by constructing a table of values, determining and plotting x and y-intercepts, or using slope and y-intercepts
- Solve systems of linear equations with two unknown using graphing, substitution, or elimination

TRANSFERABILITY: N/A

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**

GRADING CRITERIA: 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

EVALUATION CRITERIA:

Your course mark is determined by:

4 section tests	40 %
Midterm	20 %
Final Exam	40 %

All tests and exams MUST be written at the scheduled times. A missed test (exam) will result in a score of ZERO on that test (exam). The final exam is scheduled by the registrars' office during GPRC Exam weeks.

MA 0110 Test Schedule for fall 2021

Test #1	% towards the Final Exam	Topics	Recommended Test Date	Mark Obtained
1	10%	Numbers and Roots & Exponents	September 21 Tuesday	
2	10%	Polynomials & Relations and Functions	October 7 Thursday	
3	10%	Trigonometry	October 28 Thursday	
Midterm	**20%**	**All the Above**	**November 2 Tuesday**	
4	10%	Measurement	November 18 Thursday	
5	10%	Linear Functions & Systems of Equations	December 2 Thursday	
Final Exam	**40%**		**TBA (Dec. 11 – 19)**	

STUDENT RESPONSIBILITIES:

In addition to the ***Student Rights and Responsibilities*** as set out in the college websitewww.gprc.ab.ca/d/STUDENTRIGHTSRESPONSIBILITIES , the following guidelines will maintain an effective learning environment for everyone:

1. Regular attendance is expected of all students in all mathematics courses. Your success in math is directly linked to your attendance.

2. Students are expected to be punctual. Arrive on time for classes and remain for the duration of scheduled classes.

3. Refrain from disruptive talking or socializing during class time.

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 College Calendar at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at https://www.gprc.ab.ca/about/administration/policies

How to use a module:

1. Read and thoroughly understand the concepts and terminology of a section.

2. Understand and do each example very carefully using the terminology.
   If difficulties arise, **Do not hesitate to ask for help.**

3. Match each question in an exercise with the corresponding examples before the exercise. *If difficulties arise, return in your module and rework the examples.*

4. Attempt the exercise questions and check the answers before moving on to the next section. ***If difficulties arise,*** **Do not hesitate to ask for help.**