



DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – SPRING 2021

**MA0110 (A4) - Mathematics Grade 10-C Equivalent - 5 (0-0-7.5) HS 112.5 Hours for
7.5 Weeks**

INSTRUCTOR: Reddy Ganta **PHONE:** (780) 539-2810 or 2850

OFFICE: Virtual **E-MAIL:** RGanta@gprc.ab.ca

OFFICE HOURS: Tuesday to Friday 8:00 – 8:30 and by appointment

SPRING 2021 DELIVERY:

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

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

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:

Textbook: Package of MA0110 modules, 2017;
Scientific calculator, Computer with internet access, Printer and Scanner.

DELIVERY MODE: Students will join the class on Zoom as this course will be delivered online due to the COVID-19 Pandemic. 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.**

- **Module tests must be written as listed on page 5.** You must revise and review the material thoroughly before taking Module test(s) / exam. When writing a test, be sure to show all your work on the test paper. Marks are given for the method as well as the final answer. Even though 50% is a passing mark, a mark of **at least 60% in any section(s) test** is recommended.
- **One lowest test mark out of 5 test marks will be ignored. Best 4 test marks out of 5 test mark will be used for the final grade.**
- Upon completion of the first five units, a midterm test will be written on **Thursday, June 3**. If you miss this date, you will receive a mark of 0% on your midterm. Upon completion of all eight units, you will write a final exam on **Friday June 25**. Be sure to leave time to prepare for this important exam! It is worth a large percentage of your final grade.
- **Consult your instructor immediately if you find yourself falling behind.**

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

EVALUATION CRITERIA:

Your final mark is determined by:

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

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

Test Schedule for Spring 2021

Topics / Tests / Exams

Test #1	% towards the Final Exam	Topics	Recommended Test Date	Date Written	Mark Obtained
1	10%	Numbers and Roots & Exponents	May 11 Tuesday		
2	10%	Polynomials & Relations and Functions	May 21 Friday		
3	10%	Trigonometry	May 31 Monday		
Midterm	20%	All of the Above	June 3 Thursday		
4	10%	Measurement	June 14 Monday		
5	10%	Linear Functions & Systems of Equations	June 22 Tuesday		
Final Exam	40%		June 25 Friday		

STUDENT RESPONSIBILITIES:

In addition to the *Student Rights and Responsibilities* as set out in the college website, 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. Please mute your mike when you are not talking during the class.
2. Students are expected to be punctual. Arrive on time for classes and remain for the duration of scheduled classes.
3. Students must actively communicate with their instructor. If you have questions or concerns throughout the course, please send an email or call.

ELECTRONIC DEVICES:

No unspecified electronic devices will be allowed in exams.

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 Admission Guide 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>

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

STUDENT PRINTING POLICY: N/A