# DEPARTMENT OF ACADEMIC UPGRADING COURSE OUTLINE - FALL 2021 MA0081 (E2) - Basic Mathematics II - 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 |  |
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| OFFICE: | B301 | E-MAIL: | Rganta @ gprc.ab.ca |
| OFFICE HOURS: | TBA |  |  |

## CALENDAR DESCRIPTION:

This course is a modularized program of study which covers whole numbers, decimals, fractions, integers, introduction to algebra, and introduction to equations, metric measurement, dimensional geometry, and problem solving.

## PREREQUISITE(S)/COREQUISITE:

MA0060 or equivalent math placement test score

## REQUIRED TEXT/RESOURCE MATERIALS:

Textbook: Package of MA0081 modules;
Loose leaf paper or notebook; 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.
- MA0081 is a modularized math course divided into 9 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 4).
- One lowest test mark out of 5 test marks will be ignored.


## COURSE OBJECTIVES:

## This course introduces students to:

- Order of operations using whole numbers and decimals
- the concept of fraction and the related terminology
- basic operations using fractions and order of operations with fractions
- the concept of integers, basic operations using integers, and order of operations with integers
- the concept of phrases for a mathematical expression
- the concept of like terms, unlike terms, and collection them in an expression
- the steps to solve an equation and use of equations in real life word problems
- metric system of mass, distance, and volume and its conversion
- the concept of perimeter, area and volume, and its use in real life situation


## LEARNING OUTCOMES:

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

- Simplify whole number and decimal expressions using the rules for order of operations
- Verify whether or not the fractions in a pair are equivalent
- Arrange a list of fractions in order of smallest to largest or vice versa
- Simplify complex fractions with basic operations in the numerator and/or denominator
- Solve real-life problems with fractions
- Evaluate integral expressions in which order of performing operations must be determined
- Identify the like terms of an expression and simplify the expression by collecting the like terms
- Solve equations using additive inverse and/or the division or multiplication property
- Solve real life word problems involving metric units, time, or temperature
- Find the perimeter and area of general and complex shapes
- Find the volume and surface area of basic pyramids and prisms


## TRANSFERABILITY:

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 <br> Grade | 4-point <br> Equivalent | Percentage <br> Guidelines | Alpha <br> Grade | 4-point <br> Equivalent | Percentage <br> 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 | $77-79$ | $\mathrm{D}+$ | 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 0081 Test Schedule for fall 2021

| Test \# | \% towards the Final Exam | Topics | Test/Exam Date | Mark Obtained |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 10\% | Whole Numbers \& Decimals | September 21 Tuesday |  |
| 2 | 10\% | Intro to Fractions $\&$ Operations With Fractions | October 7 <br> Thursday |  |
| Midterm | 30\% | All the above | October 11 <br> Monday |  |
| 3 | 10\% | Intro to Integers \& Intro to Algebra | November 2 <br> Tuesday |  |
| 4 | 10\% | Intro to Equations \& Measurements | November 18 Thursday |  |
| 5 | 10\% | Dimensional Geometry | December 2 Thursday |  |
| Final | 40\% |  | To be announced (Dec. 11-20) |  |

## 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.

