



## **DEPARTMENT OF ACADEMIC UPGRADING**

### **COURSE OUTLINE – FALL 2017**

#### **MA0081 (A2 & C2) - Basic Mathematics II - 5 (0-0-7.5) HS 112.5 Hours for 15 Weeks**

**INSTRUCTOR:** Sukhvir Sandhu      **PHONE:** (780) 539-2810 or 2234

**OFFICE:** A205 or B301B      **E-MAIL:** ssandhu@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:**

Text Book: Package of MA0081 modules, 2011;

Loose leaf paper or note book; a pencil, an eraser, a geometry set.

#### **DELIVERY MODE:**

- 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.**

- **Module tests must be written as listed on page 6.** Follow these dates as closely as you can. You must revise and review the material thoroughly before taking Module test(s) / exam. You are encouraged to write a test early if you are prepared. When writing a test, be sure to show all of 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 four modules, a midterm test will be written on or before **Tuesday, October 10**. If you miss this date, you will receive a mark of 0% on your midterm. Upon completion of all nine sections, you will write a three hour final exam. 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 schedule.** Your instructor may ask you to spend more time in the Math Lab and get help often. **All tests / rewrite must be written by Thursday, November 30.**

## **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: N/A

## EVALUATION CRITERIA:

Your final mark is determined by:

4 section tests	32 %
Midterm	30 %
Final Exam	38 %

**GRADING CRITERIA:**

<b>GRANDE PRAIRIE REGIONAL COLLEGE</b>			
<b>GRADING CONVERSION CHART</b>			
<b>Alpha Grade</b>	<b>4-point Equivalent</b>	<b>Percentage of Class</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>

How to use a module:

1. Read the title of each module, table of contents page, and title of each section. You will observe a progressive growth of operations/concepts.
2. Read and thoroughly understand the concepts and terminology of a section.
3. Understand and do each example very carefully using the terminology.  
***If difficulties arise, meet with your instructor.***
4. Match each question in an exercise with the corresponding examples before the exercise. *If difficulties arise, return in your module and rework the examples.*
5. Attempt the exercise questions and check the answers before moving on to the next section. ***If difficulties arise, meet with your instructor.***
6. Review the terminology of the module(s) before taking any test/exam.

## Test Schedule for fall 2017

### Topics / Tests / Exams

Test #	% towards the Final Exam	Topics	Recommended Test Date	Date Written	Mark Obtained
1	8%	Whole Numbers & Decimals	September 18 Monday		
2	8%	Intro to Fractions & Operations With Fractions	October 3 Tuesday		
<b>Midterm</b>	<b>30%</b>	<b>All the above</b>	<b>October 10 Tuesday</b>		
3	8%	Intro to Integers & Intro to Algebra	October 24 Tuesday		
4	8%	Intro to Equations & Measurements	November 15 Wednesday		
5	8%	Dimensional Geometry	November 30 Thursday		
<b>Final</b>	<b>38%</b>		<b>To be announced</b> (Dec. 9 – 19)		

## **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. Attendance will be taken daily.
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.
4. Be respectful of others regarding food or beverages in the classroom. Clean up your eating area and dispose of garbage.
5. Recycle paper, bottles, and cans in the appropriate containers.
6. Children are not permitted in the classrooms.
7. Students are expected to notify the instructor of any extenuating circumstances.

## **ELECTRONIC DEVICES:**

Students are expected to turn off cell phones during class time or in labs. 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 [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.

## **STUDENT PRINTING POLICY:**

Please refer to the College website (Home > Tuition and Fees) for the printing policy which limits the free use of paper; extra charges will be applied if the limit is exceeded.