



DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – WINTER 2016

MA0060 (A3 & B3): BASIC MATHEMATICS I – 5 (5-0-0) 75 Hours

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 a review of reading, writing and rounding of whole numbers, if required, as well as whole number multiplication and division. Problem-solving is emphasized throughout, and squares, square roots, and the order of operations are introduced.

PREREQUISITE(S)/COREQUISITE:

Appropriate math placement test score and EN0080 placement

REQUIRED TEXT/RESOURCE MATERIALS:

Text Book: STEPPING IT UP Preparing for College Math Basic Mathematics I MA0060;
Loose leaf paper or note book; a pencil, an eraser, a ruler.

DELIVERY MODE:

- MA0060 is a modularized math course. The topic of Whole Numbers is divided in the text book into 8 separate parts called sections. Each new section is emphasized with a blue strip. At the end of each section, there is an exercise or set of practice problems. The answers to the practice problems are at the end of the book. Each section is further divided into sub-sections which are numbered in green circles. The name of the each sub-section is written in black.

- The instructions for each sub-section are clearly presented followed by several examples along with colored-notes for emphasis. Study the instructions and work through the examples before starting the assigned questions from the exercise. Check your work often to make sure you understand each new topic. The key to success in working with these sections is to ask questions whenever you have difficulty understanding the instructions, the examples, or the exercise questions. **Do not hesitate to ask for help.**
- **Section tests must be written as listed on page 5.** Follow these dates as closely as you can. You must revise and review the material thoroughly before taking section(s) test/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.
- **Only one test re-write of your choice is allowed. It will replace the corresponding mark, and must be taken during the last week of classes.**
- Upon completion of the first five sections, a midterm test will be written on or before **Wednesday, March 9.** If you miss this date, you will receive a mark of 0% on your midterm. Upon completion of all eight 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 Monday, April 11.**

COURSE OBJECTIVES:

The Course introduces students to:

- The concept of whole numbers
- Arithmetic manipulation of numbers
- The concept of expression, exponents, and order of operations
- Problem-solving skills and the application of numbers

COURSE OUTCOME:

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

- Write and read standard numbers in expanded or word form
- Add several single-digit or several-digit numbers
- Identify the associative & commutative property and zero identity of addition
- Subtract whole numbers when borrowing is necessary or not necessary
- Verify the answer to a subtraction problem
- Multiply a several-digit number by a single-digit or a several-digit number
- Perform division by a one-digit or two or more digit number
- Use multiplication to verify a division answer
- Perform several arithmetic operations in the proper order
- Apply arithmetic manipulation (+, -, ×, ÷) to real-life situations
- Use estimation skills to answer to real-life situations

TRANSFERABILITY: N/A

GRADING CRITERIA:

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

Winter 2016

MA0060 Topics/Tests

Test #	% towards the Final Exam	Topics	Recommended Test Date	Date written	Mark
1	10 %	Understanding Whole Numbers & Adding Whole Numbers	January 27 Wednesday		
2	10 %	Subtracting Whole Numbers & Multiplying Whole Numbers	February 24 Wednesday		
3	5 %	Dividing Whole Numbers	March 4 Friday		
	20 %	Midterm (Sections 1 – 5)	March 9 Wednesday		
4	10 %	Exponents & Order of Operations & Rounding and Estimating	March 28 Monday		
5	5 %	Solving Applied Problems Involving Whole Numbers	April 7 Thursday		
	40 %	Final Exam (Sections 1 – 8)	To be announced (April 15 - 26)		

EVALUATION CRITERIA:

Your final mark is determined by:

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

**Winter 2016
MA0060 Homework Schedule**

Get yourself familiarized with the book and the Course Outline Jan. 6

Exercise: Getting Familiarized with the Book Jan. 7

Check your work with your instructor. Jan. 8

Note: Under each section, you must read and understand each example, do each Practice Problem and all the problems in the exercise at the end of each section. Check your answers before you do the next question.

Section 1: Understanding Whole Numbers

Sub-sections 1, 2, & 3: Examples & Practice Problems 1-5 Jan. 11

Sub-section 3 & 4: Examples and Practice Problems 5-8 Jan. 12

Exercise: #1 - 30 Jan. 13

Exercise: #31 - 58 Jan. 14

Quick Quiz 1: 1-4, Review the section Jan. 15

Section 2: Adding Whole Numbers

Sub-sections 1, 2, & 3: Examples & Practice Problems 1-4 Jan. 18

Sub-sections 4, 5, & 6: Examples & Practice Problems 5-9 Jan. 19

Exercise: 1 - 30 Jan. 20

Exercise: 31 – 52 Jan. 21

Quick Quiz 2: 1 – 4, Review the section Jan. 22

Review Section 1 & Section 2 Jan. 25

Test 1 (Section 1 & Section 2) Jan. 26

Section 3: Subtracting Whole Numbers

Sub-sections 1, 2, & 3: Examples & Practice Problems 1-6 Jan. 27

Sub-sections 4 & 5: Examples & Practice Problems 7-11 Jan. 28

Exercise: 5 - 30 Jan. 29

Exercise: 31 – 60 Feb. 1

Exercise: 61 – 86 & Quick Quiz 3: 1-4 Feb. 2

Section 4: Multiplying Whole Numbers

Learn the times-table (0-9)

Sub-sections 1, 2, & 3: Examples & Practice Problems 1-6

Sub-sections 3, 4, & 5: Examples & Practice Problems 7-12

Sub-sections 5 & 6 7: Examples & Practice Problems 13 - 15

Exercise: 1 – 40

Exercise: 41 – 75

Exercise; 76 – 92; Quick Quiz 4: 1-4

Review: Section 3 & Section 4

Test 2 (Wednesday)

Feb. 3 & 4

Feb. 5

Feb. 8

Feb. 9

Feb. 10

Feb. 11

Feb. 12

Feb. 22, & 23

Feb. 24

Section 5: Dividing Whole Numbers

Sub-sections 1 & 2: Examples & Practice Problems 1-5

Sub-sections 3 & 4: Examples & Practice Problems 6-10

Exercise: #1 – 40

Exercise: #41 – 75

Exercise: 76 – 88; Quick Quiz 5: 1 – 4

Review section 5

Test 3 (Friday)

Feb. 25

Feb. 26

Feb. 29

Mar. 1

Mar. 2

Mar. 3

Mar. 4

Study for Midterm

Mar. 7 & 8

Midterm Exam (Wednesday)

Mar. 9

Section 6: Exponents and the Order of Operations

Sub-sections 1 & 2: Examples & Practice Problems 1-5

Sub-section 2: Examples & Practice Problem 6-8, Ex. 1-20

Exercise: #21 – 50

Exercise: #51 - 90

Exercise: #91 – 100; Quick Quiz 6: 1 – 4

Mar. 10

Mar. 11

Mar. 14

Mar. 15

Mar. 16

Section 7: Rounding and Estimating

Sub-section 1: Examples & Practice Problem 1-5

Sub-section 2: Examples & Practice Problem 6-9, Ex. 3-20

Mar. 17

Mar. 18

Exercise:	#21 – 50	Mar. 21
Exercise:	#51 – 72; Quick Quiz 7: 1-4	Mar. 22
Review:	Section 6 & Section 7	Mar. 23 & 24
Test 4 (Monday)		Mar. 28

Section 8: Solving Applied Problems Involving Whole Numbers

Sub-section 1: Examples and Practice Problems 1 – 4	Mar. 29
Sub-section 2: Examples and Practice Problems 5 - 7	Mar. 30
Exercise: #1 -12	Mar. 31
Exercise: #13 - 26	Apr. 1
Exercise: #27 – 34; Quick Quiz 8: 1 – 4	Apr. 4
Review: Section 8	Apr. 5 & 6
Test 5 (Thursday)	April 7
Review for Final	Apr. 8, 11, 12, & 13
Final Exam	TBA (April 15 - 26)

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/**

**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.