

#### DEPARTMENT OF ACADEMIC UPGRADING

# COURSE OUTLINE – WINTER 2012 INTRODUCTION TO MATH 0091

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

**OFFICE:** Math Lab A210 **E-MAIL:** ssandhu@gprc.ab.ca

**OFFICE HOURS:** 10:30 to 11:30 am daily in the Math Lab or by appointment

## PREREQUISITE(S)/COREQUISITE:

MA0081, or equivalent math placement test score

# REQUIRED TEXT/RESOURCE MATERIALS:

Package of MA0091 modules, Updated 2011 Scientific calculator

### **CALENDAR DESCRIPTION:**

This course is a modularized program of study which covers basic computational skills, ratio and proportion, percent; an introduction to exponents, basic operations on polynomials, equations, basic algebraic word problems; fundamentals of geometry, introduction to graphing, and statistics.

# **CREDIT/CONTACT HOURS:**

MA 0091 Basic Mathematics III 5 (5-0-0)

Time: 75 Hours

#### **DELIVERY MODE:**

MA0091 is a modularized math course divided into 10 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 the module. Check your work often to make sure you understand each new topic. The key to success in working with modules is to ask questions whenever you have difficulty understanding the instructions, the examples, or the exercises. **Do not hesitate to ask for help.** 

After each module you must write a test. When writing a test, be sure to show all of your work on the test paper. Marks are given for method as well as final answer. A passing mark of 60% is required on the test before continuing on to the next module. If you are unable to attain this mark, you must review the material and rewrite the test. The first and second test marks will be averaged.

A 50-minute midterm, which will cover the first four modules, must be written by **Tuesday**, **February 28.** If you miss this date, you will receive a mark of 0% on your midterm. Upon completion of all the course modules, you will write a three hour final exam. Be sure to leave time to prepare for these important exams! They are worth a large percentage of your final grade.

The recommended test date for each module and the midterm is on the back of the next page. Follow these dates as closely as you can. You are encouraged to write a test early if you are prepared. **Consult your instructor immediately if you find yourself falling behind schedule.** Your instructor may need to reassess your math skills to ensure that you are placed in a course where you can be successful. **All tests must be written by Thursday, April 12.** 

#### **Bonus**

When you write your module tests on or before the given date, you will be awarded an additional 2% on your score for each test.

# **SUCCESS STANDARD:**

Although 50% is considered a pass for this course, if you wish to be successful at the next level, we strongly recommend that you achieve a mark of 60% or better.

# **GRADING CRITERIA:**

Your final mark is determined by:

10 module tests50%Midterm15%Final Exam35%

GRANDE PRAIRIE REGIONAL COLLEGE							
GRADING CONVERSION CHART							
Alpha Grade	4-point	Percentage	Designation				
Aiplia Grade	Equivalent	Guidelines	Designation				
A⁺	4.0	90 – 100	EXCELLENT				
Α	4.0	85 – 89	LACLLLINI				
<b>A</b> <sup>-</sup>	3.7	80 – 84	FIRST CLASS STANDING				
B⁺	3.3	77 – 79	TIKST CLASS STANDING				
В	3.0	73 – 76	GOOD				
B <sup>-</sup>	2.7	70 – 72	GOOD				
C <sup>+</sup>	2.3	67 – 69					
С	2.0	63 – 66	SATISFACTORY				
C_	1.7	60 – 62					
D <sup>+</sup>	1.3	55 – 59	MINIMAL PASS				
D	1.0	50 – 54	IAIIIAIIAIVE I VOO				
F	0.0	0 – 49	FAIL				
WF	0.0	0	FAIL, withdrawal after the deadline				

# Objectives / Tests / Exams

Module	TOPIC/DESCRIPTION	Recommended Time & Test Date	Date written	Your Mark
1	Review - four basic operations on decimals, fractions, & integers -order of operations	7 days January 13 Friday		
2	Ratio and Proportion -Simplifying and reducing ratios -rates and proportions -similar figures	7 days January 24 Tuesday		
3	Percent -changing percent to decimals & fractions -changing decimals and fractions to percent -application of percent	6 days Feb. 1 Wednesday		
4	Introduction to Exponents -laws of exponents -scientific notation	6 days Feb. 9 Thursday		
5	Introduction to Polynomials -combining like terms -basic operations with polynomials	6 days Feb. 17 Friday		
	MIDTERM must be written on or before	Tuesday Feb. 28		
6	Equations and Inequalities -solving -evaluating expressions, formulas -rearranging formulas	9 days March 12 Monday		
7	Language of Algebra -writing algebraic expressions and equations -word problems	5 days March 19 Monday		
8	Fundamental of Geometry -plane geometry & polygons -Parallel Line Theorem -circle geometry	7 days March 28 Wednesday		
9	Introduction to Graphing -reading and making graphs in the rectangular coordinate system -slope of a line	4 days April 3 Tuesday		
10	Statistics -organizing data, graphs -measures of central tendency	6 days April 12 Thursday		
	FINAL EXAM - 3 HOURS	TBA (April 16 - 26)		

# MA0091 Winter 2012 Homework Schedule

1.	Review							
	1-4	5-7	8-10		11-13	14	Review	Test: Friday Jan. 13
	Jan.5	6	9		10	11	12	
2.	Ratio and	Proporti	on					
	1-3	4&5	6&7	8	9&10	Re	eview	Test: Tues. Jan. 24
	Jan. 16	17	18	19	20		23	
3.	Percent							
	1-3	4-6	7-8	9	Review			Test: Wed. Feb. 1
	Jan. 25	26	27	30	31			
4.	Introductio	n to Exp	onents					
	1&2	3	4	5	Review			Test: Thur. Feb. 9
	Feb. 2	3	6	7	8			
5.	Introductio	n to Pol	ynomials					
	1&2	3&4	5&6	7&8	8 Review			Test: Friday Feb. 17
	Feb. 10	13	14	15	16			

# Midterm Exam on Tuesday Feb. 28

6.	Equations 1&2 Feb. 29	3&4 <b>Mar.1</b>	5 <b>2</b>	6 7&8 <b>5 6</b>		10&11 <b>8</b>	Review <b>9</b>	Test: Mon. March 12
7.	Language 1&2 <b>Mar. 13</b>	of Algeb 3&4 <b>14</b>	ra 5 <b>15</b>	Review 16				Test: Mon. March 19
8.	Fundamer 1&2 <b>March 20</b>	3	Geometry 4 <b>22</b>	5 <b>23</b>	6 <b>26</b>	Revie <b>27</b>		Test: Wed. March 28
9.	Introduction 1 March 28	2&3	phing 4&5 <b>30</b>		riew ril 2			Test: Tues. April 3
10.	Statistics 1&2 April 4	3&4 <b>5</b>	5&6 <b>9</b>	7&8 <b>10</b>	9& Rev <b>11</b>	view .		Test: Thur. April 12

Final exam to be announced (April 16 - 26)

#### **STUDENT RESPONSIBILITIES:**

In addition to the *Student Rights and Responsibilities* as set out in the **College Calendar** (pages 47-50), 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:**

Please refer to pages 48-49 of the College Calendar regarding plagiarism, cheating, and the resultant penalties. These are serious issues and will be dealt with severely.