



**DEPARTMENT OF ACADEMIC UPGRADING**

**COURSE OUTLINE – WINTER 2012**

**INTRODUCTION TO MATH 0120**

**INSTRUCTOR:** Alan Iwaskow                      **PHONE:** (780) 539-2713  
**OFFICE:** C207    **E-MAIL:** aiwaskow@gprc.ab.ca

**OFFICE HOURS:** 5:30-6:00pm Tuesday and Thursday in the Math Lab A210

**PREREQUISITE(S)/COREQUISITE:**

MA0110, MA 10 Pure, or equivalent math placement test score

**REQUIRED TEXT/RESOURCE MATERIALS:**

Package of MA0120 modules, 2007

Scientific calculator, graph paper

**CALENDAR DESCRIPTION:**

This course explores equations, inequalities, systems of equations, exponents and radicals, rational expressions and equations, polynomial functions and equations, other functions, geometry and mathematical reasoning, and mathematical applications.

**CREDIT/CONTACT HOURS:**

MA 0120 Mathematics Grade 11 Equivalent (Pure) 5 (5-0-0)

Time: 75 Hours

**DELIVERY MODE:**

MA0120 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. As well, the instructor will teach a mini lesson daily to clarify the more difficult concepts and also to keep you on schedule. The key to success 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 for the final answer. A passing mark of 50% is required. 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. Repeat tests must be written outside of class time. A 50-minute midterm, which will cover the first five modules, will be written on **Tuesday, Feb 28**. Upon completion of all the course modules, you will write a three hour final exam.

The test date for each module and the midterm is on the back of the next page. Any student not attending class on a test date will receive a grade of zero for that test unless a phone call is made *prior* to the time of the test and an explanation of the absence satisfactory to the instructor is provided. As well, there may be a deduction of 10% for any late test.

**Consult your instructor immediately if you find yourself unable to keep up to the schedule.** Your instructor may need to reassess your math skills to ensure that you are placed in a course where you can be successful. Extra help is available outside of class time.

All module tests and rewrites must be written by **Thursday, April 12**.

**TRANSFERABILITY:**

This course is listed in the Alberta Transfer Guide. It is accepted at colleges and universities in Alberta as equivalent to Math 20 Pure.

**OBJECTIVES:**

Students will develop problem solving skills and gain an appreciation of the mathematics of modern society.

**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:

9 module tests	45%
Midterm	20%
Final Exam	35%

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

**MA0120 Winter 2012**  
**Objectives / Tests / Exams**

Module	TOPIC/DESCRIPTION	Test Date	Your Mark
1	Equations and Inequalities -solving linear equations and inequalities -graphing linear equations and inequalities -absolute value equations and inequalities	Jan 12 Thursday	
2	Systems of Equations - solving systems of equations by graphing, substitution, and elimination; applications	Jan 19 Thursday	
3	Exponents and Radicals - rational exponents; four basic operations on exponents and radicals; solving radical equations	Jan 31 Tuesday	
4	Rational Expressions -nonpermissible values; simplifying; four basic operations; equations	Feb 9 Thursday	
5	Geometry -basic theorems -circle terminology; properties of angles and chords in a circle; tangents to a circle	Feb 16 Thursday	
	<b>MIDTERM EXAM</b>	<b>Tuesday Feb 28</b>	
6	Relations and Functions - domain and range; functional notation; graphing; inverse functions; transformations	Mar 8 Thursday	
7	Quadratic Functions - graphing; completing the square; characteristics; applications	Mar 20 Tuesday	
8	Quadratic Equations - solving by factoring and quadratic formula; nature of roots; applications	Mar 29 Thursday	
9	Polynomial Functions & Equations - synthetic division - remainder & factor theorems; equations and graphs	Apr 10 Tuesday	
	<b>Final Exam 3-hours (date to be announced)</b>	<b>April 16-26</b>	

## Winter 2012 Night Class Schedule

	<b>MA0120</b>
<b>Jan 5 Th</b>	M1 Ex 1-3
<b>Jan 10 Tu</b>	M1 Ex 4-6
<b>Jan 12 Th</b>	M1 Rev, Test 1 M2 Ex 1-3
<b>Jan 17 Tu</b>	M2 Ex 4-5
<b>Jan 19 Th</b>	M2 Rev, Test 2
<b>Jan 24 Tu</b>	M3 Ex 1-5
<b>Jan 26 Th</b>	M3 Ex 6-9
<b>Jan 31 Tu</b>	M3 Ex 10, Rev, Test 3
<b>Feb 2 Th</b>	M4 Ex 1-4
<b>Feb 7 Tu</b>	M4 Ex 5-6
<b>Feb 9 Th</b>	M4 Rev, Test 4 M5 Ex 1-2
<b>Feb 14 Tu</b>	M5 Ex 3-6
<b>Feb 16 Th</b>	M5 Rev, Test 5
	<b>Winter Break</b>
<b>Feb 28 Tu</b>	Midterm Review <b>MIDTERM</b>
<b>Mar 1 Th</b>	M6 Ex 1-2
<b>Mar 6 Tu</b>	M6 Ex 3-5
<b>Mar 8 Th</b>	M6 Rev, Test 6 M7 Ex 1
<b>Mar 13 Tu</b>	M7 Ex 2-4
<b>Mar 15 Th</b>	M7 Ex 5-6, Rev
<b>Mar 20 Tu</b>	Test 7 M8 Ex 1-2
<b>Mar 22 Th</b>	M8 Ex 3-5
<b>Mar 27 Tu</b>	M8 Ex 6-7
<b>Mar 29 Th</b>	M8 Rev, Test 8 M9 Ex 1
<b>Apr 3 Tu</b>	M9 Ex 2-5
<b>Apr 5 Th</b>	M9 Ex 6-9
<b>Apr 10 Tu</b>	M9 Ex 10, Rev, Test 9
<b>Apr 12 Th</b>	Final Review

**FINAL EXAMS TO BE ANNOUNCED (April 16-26)**

## **STUDENT RESPONSIBILITIES:**

In addition to the *Student Rights and Responsibilities* as set out on 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, including graphing calculators, will be allowed in exams.

## **STATEMENT ON PLAGIARISM:**

Please refer to the College website for policies regarding plagiarism and cheating as well as the resultant penalties. These are serious issues and will be dealt with severely.