



Grande Prairie Regional College
Department: Academic Upgrading

COURSE OUTLINE – WINTER 2009
INTRODUCTION TO MATH 0120 (No Friday Class)

Instructor: **Sukhvir Sandhu** Phone number: 539-2234 or 2810
Instructor's office: A210 or C210 Email: ssandhu@gprc.ab.ca
Office Hours: Daily after MA0120 class.

Calendar Description:

MA0120 Mathematics Grade 11 Equivalent (Pure) 5 (5-0-0) Time: 75 Hours

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.

Prerequisite: [MA0110](#) or equivalent math placement test score.

Resource requirements:

Package of MA0120 modules, 2007
Scientific calculator, graph paper

Attendance:

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 during class. Any student **missing more than 10 classes may be debarred from writing the final exam.**

Course Delivery and Evaluation:

This course is 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 the module. Check your work **often** to make sure you understand each new topic.

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 **Thursday, February 26**. 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 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 will 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.

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.

Your final mark is determined by:

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

Final grades are given as follows:

Alpha Grade	4-Point Equivalent	Percentage Guidelines	Designation
A+	4.0	90 - 100	Excellent
A	4.0	85 - 89	
A-	3.7	80 - 84	First Class Standing
B+	3.3	76 - 79	
B	3.0	73 - 75	Good
B-	2.7	70 - 72	
C+	2.3	67 - 69	Satisfactory
C	2.0	64 - 66	
C-	1.7	60 - 63	
D+	1.3	55 - 59	Minimal Pass
D	1.0	50 - 54	
F	0.0	0 - 49	<i>Fail</i>

MA0120 – Winter 2009 (No Friday Class)

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	7 days Wednesday January 14	
2	Systems of Equations - solving systems of equations by graphing, substitution, and elimination; applications	5 days Wednesday January 21	
3	Exponents and Radicals - rational exponents; four basic operations on exponents and radicals; solving radical equations	7 days Monday February 2	
4	Rational Expressions -nonpermissible values; simplifying; four basic operations; equations	7 days Tuesday February 10	
5	Geometry -basic theorems -circle terminology; properties of angles and chords in a circle; tangents to a circle	6 days Tuesday February 24	
	MIDTERM EXAM	Thursday Feb. 26	
6	Relations and Functions - domain and range; functional notation; graphing; inverse functions; transformations	8 days Wednesday March 11	
7	Quadratic Functions - graphing; completing the square; characteristics; applications	6 days Thursday March 19	
8	Quadratic Equations - solving by factoring and quadratic formula; nature of roots; applications	7 days Monday March 30	
9	Polynomial Functions & Equations - synthetic division - remainder & factor theorems; equations and graphs	9 days Monday April 13	
	FINAL EXAM - 3 HOURS	Apr. 16-27	

Winter 2009 Homework Schedule (No Friday Class)

1. Equations and Inequalities

1 2 3&4 5&6 Review **Test: Wed. Jan. 14**
Jan.6 7 8 12 13

2. Systems of Equations.

1 2&3 4&5 Review **Test: Wed. Jan. 21**
Jan.14 15 19 20

3. Exponents and Radicals

1 2- 4 5-7 8&9 10 Review **Test: Monday Feb. 2**
Jan.21 22 26 27 28 29

4. Rational Expressions

1 2&3 4 5&6 Review **Test: Tuesday Feb. 10**
Feb.2 3 4 5 9

5. Geometry

1&2 3&4 5&6 Review **Test: Tuesday Feb. 24**
Feb.10 11 12 23

Midterm Exam on Thursday February 26

6. Relations and Function

1(A,B,C,D) 2 3A 3B 4 5 Review **Test: Wed. March 11**
Feb.26 Mar.2 3 4 5 9 10

7. Quadratic Functions

1 2&3 4&5 6 Review **Test: Thursday March 19**
Mar.11 12 16 17 18

8. Quadratic Equations

1-3 4 4&5 6 7&Review **Test: Monday March 30**
Mar.19 23 24 25 26

9. Polynomial Functions

1 2&3 4&5 6 7 8&9 10 Review **Test: Monday April 13**
Mar.30 31 Apr.1 2 6 7 8 9

Final Exam: (Apr. 16-27) to be announced

AUD STUDENT CLASSROOM DEPARTMENT GUIDELINES DRAFT May 2008

The Academic Upgrading Department is an adult education environment. Students are expected to show respect for each other as well as faculty and staff. They are expected to participate fully in achieving their educational goals in a timely manner.

Certain activities are disruptive and not conducive to an atmosphere of learning. In addition to the ***Student Rights and Responsibilities*** as set out in the College calendar, the following guidelines will maintain an effective learning environment for everyone. We ask the cooperation of all students in the following areas of classroom department.

1. Students are expected to turn off cell phones during class time or in labs.
2. Refrain from disruptive talking or socializing during class time.
3. Be respectful of others regarding food or beverages in the classroom. Clean up your eating area and dispose of garbage.
4. Recycle paper, bottles and cans in the appropriate containers.
5. Students are expected to be punctual. Arrive on time for classes and remain for the duration of scheduled classes or related activities.
6. Children are not permitted in the classrooms.
7. Students are expected to notify his/her instructor of any extenuating circumstances.

Electronic Devices

No unspecified electronic devices will be allowed in exams.

Success Standard

Although 50% is considered a pass in most courses, if you wish to be successful at the next level, we strongly recommend that you have a mark of 60% or better in your pre-requisite courses.

Examinations:

The final exam will be 3 hours long and is scheduled by the registrars' office during April 16 – April 27.

Statement on Plagiarism:

The instructor reserves the right to use electronic plagiarism detection services.