Grande Prairie Regional College
Department: Academic Upgrading

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

Instructor**:   Sukhvir Sandhu**   Phone number: **780-539-2234**
Instructor's office: **C310 or Math Lab A210**   Email**:   ssandhu@gprc.ab.ca**

Calendar Description:

MA 0120 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 8 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. 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, must be written by **Thursday, October 22.** **I**f 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 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 Monday, December 7.**

> **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	*Fail*

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	5 days Sept. 14 Monday	
2	Systems of Equations - solving systems of equations by graphing, substitution, and elimination; applications	4 days Sept. 21 Monday	
3	Exponents and Radicals - rational exponents; four basic operations on exponents and radicals; solving radical equations	6 days Sept. 30 Wednesday	
4	Rational Expressions -non-permissible values; simplifying; four basic operations; equations	6 days Oct. 8 Thursday	
5	Geometry -basic theorems -circle terminology; properties of angles and chords in a circle; tangents to a circle	5 days Oct. 20 Tuesday	
	MIDTERM EXAM	**Thursday Oct. 22**	
6	Relations and Functions - domain and range; functional notation; graphing; inverse functions; transformations	6 days Nov. 3 Tuesday	
7	Quadratic Functions - graphing; completing the square; characteristics; applications	6 days Nov. 12 Thursday	
8	Quadratic Equations - solving by factoring and quadratic formula; nature of roots; applications	6 days Nov. 24 Tuesday	
9	Polynomial Functions & Equations - synthetic division - remainder & factor theorems; equations and graphs	7 days Dec. 7 Monday	
	Final Exam 3-hours (date to be announced)	Dec.09-18	

Fall 2009 Homework Schedule (No Friday Class)

1. Equations and Inequalities

1 - 3	4 & 5	6	Review	**Test: Monday Sept. 14**
Sept.3	**8**	**9**	**10**	

2. Systems of Equations.

1	2 & 3	4	5 & Review	**Test: Monday Sept. 21**
Sept.14	**15**	**16**	**17**	

3. Exponents and Radicals

1	2&3	4&5	6&7	8&9	10 & Review	**Test: Wednesday Sept. 30**
Sept.21	**22**	**23**	**24**	**28**	**29**	

4. Rational Expressions

1	2	3 & 4	5	6	Review	**Test: Thursday Oct. 8**
Sept.29	**30**	**Oct.1**	**5**	**6**	**7**	

5. Geometry

1&2	3	4	5 & 6	Review	**Test: Tuesday Oct. 20**
Oct.8	**13**	**14**	**15**	**19**	

Midterm Exam on Thursday Oct. 22

6. Relations and Function

1(A,B,C,D)	2	3A	3B	4 & 5	Review	**Test: Tuesday Nov. 3**
Oct.22	**26**	**27**	**28**	**29**	**Nov.2**	

7. Quadratic Functions

1&2	3&4	5	6& Review	**Test: Thursday Nov. 12**
Nov.4	**5**	**9**	**10**	

8. Quadratic Equations

1&2	3	4	5	6&7	Review	**Test: Tuesday Nov. 24**
Nov.12	**16**	**17**	**18**	**19**	**23**	

9. Polynomial Functions

1&2	3&4	4 - 6	7	8&9	10	Review	**Test: Take home.**
Nov.24	**25**	**26**	**30**	**Dec.1**	**2**	**3**	**Take after class on Dec.3.**

Final Exam: (Dec. 9 – 18) to be announced

AUD STUDENT CLASSROOM DEPORTMENT 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 deportment.

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 the 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 Registrar's Office during December 9 – December 18.

Statement on Plagiarism:
The instructor reserves the right to use electronic plagiarism detection services.