DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – FALL 2012

INTRODUCTION TO MATH 0120

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

OFFICE HOURS: Posted on office door.

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 **Thursday, October 25**. 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.

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%

GRANDE PRAIRIE REGIONAL COLLEGE			
GRADING CONVERSION CHART			
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**	**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**

MA0120 FALL 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	7 days (equiv) Sept. 14 Friday	
2	Systems of Equations - solving systems of equations by graphing, substitution, and elimination; applications	5 days (equiv) Sept. 21 Friday	
3	Exponents and Radicals - rational exponents; four basic operations on exponents and radicals; solving radical equations	7 days (equiv) Oct. 2 Tuesday	
4	Rational Expressions -nonpermissible values; simplifying; four basic operations; equations	7 days (equiv) Oct. 12 Friday	
5	Geometry -basic theorems -circle terminology; properties of angles and chords in a circle; tangents to a circle	6 days (equiv) Oct. 22 Monday	
	MIDTERM EXAM	**Thursday Oct. 25**	
6	Relations and Functions - domain and range; functional notation; graphing; inverse functions; transformations	8 days (equiv) Nov. 5 Monday	
7	Quadratic Functions - graphing; completing the square; characteristics; applications	6 days (equiv) Nov. 16 Friday	
8	Quadratic Equations - solving by factoring and quadratic formula; nature of roots; applications	7 days (equiv) Nov. 27 Tuesday	
9	Polynomial Functions & Equations - synthetic division - remainder & factor theorems; equations and graphs	9 days (equiv) Dec. 10 Monday	
	Final Exam 3-hours (date to be announced)	**Dec. 13-22**	

Fall 2012 Homework Schedule

1. Equations and Inequalities

1, (2)	(2), 3	3	4, 5, (6)	(6), Review	**Test: Friday, Sept. 14**
Sept.6	**7**	**10**	**11**	**13**	

2. Systems of Equations.

1	2	3, 4, (5)	(5), Review	**Test: Friday, Sept. 21**
Sept.14	**17**	**18**	**20**	

3. Exponents and Radicals

1	2, 3	4,5,6	7,8,9	10	Review	**Test: Tuesday, Oct. 2**
Sept.21	**24**	**25**	**27**	**28**	**Oct.1**	

4. Rational Expressions

1, (2)	(2), 3	4	4, 5	6& Review	**Test: Friday, Oct. 12**
Oct.2	**4**	**5**	**9**	**11**	

5. Geometry

1&2	3, 4	5, 6	Review	**Test: Monday, Oct. 22**
Oct.15	**16**	**18**	**19**	

Midterm Exam on Thursday, Oct. 25

6. Relations and Function

1(A,B)	1(C, D), 2	3A	3B, (4)	(4), 5	Review	**Test: Monday, Nov. 5**
Oct.25	**26**	**29**	**30**	**Nov.1**	**2**	

7. Quadratic Functions

1, 2, (3)	(3), 4, 5	6, Review	**Test: Friday Nov. 16**
Nov.6	**8**	**15**	

8. Quadratic Equations

1	2&3	4	5, 6	7	Review	**Test: Tuesday, Nov. 27**
Nov.16	**19**	**20**	**22**	**23**	**26**	

9. Polynomial Functions

1, 2, 3	4, 5	6	7, 8	9, 10	Review	**Test: Monday, Dec. 10**
Nov. 29	**30**	**Dec.3**	**4**	**6**	**7**	

Final Exam: (Dec. 13 – 22) to be announced

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 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.