DEPARTMENT OF ACADEMIC UPGRADING

COURSE OUTLINE – WINTER 2011

INTRODUCTION TO MATH 0110

INSTRUCTOR: Sukhvir Sandhu **PHONE:** (780) 539-2810
OFFICE: Math Lab A210 **E-MAIL:** ssandhu@gprc.ab.ca

OFFICE HOURS: Daily, 10:30 – 11:30 am in the Math lab

PREREQUISITE(S)/COREQUISITE:
MA0100, or equivalent math placement test score

REQUIRED TEXT/RESOURCE MATERIALS:
Package of MA0110 modules, 2004
Scientific calculator, graph paper

CALENDAR DESCRIPTION:
This course first reviews number systems and then explores exponents, radicals, polynomials, probability, coordinate geometry, and introduction to functions, trigonometry (including sine and cosine laws) and statistics.

CREDIT/CONTACT HOURS:
MA 0110 Mathematics Grade 10 equivalent (Pure) 5 (5-0-0)
Time: 75 Hours

DELIVERY MODE:

MA0110 is a modularized math course consisting of 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 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 five modules, must be written by **Friday, February 18**. 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 Tuesday, 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.

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**

TRANSFERABILITY:

This course is listed in the Alberta Transfer Guide. It is accepted at colleges and universities in Alberta as equivalent to Math 10 Pure.

MA0110 WINTER 2011
Objectives/Tests/Exams

Module	TOPIC/DESCRIPTION	Recommended Time & Test Date	Date written	Your mark
1	Review	6 days Wednesday January 12		
2	Polynomials - evaluating polynomials; - four basic operations	7 days Friday January 21		
3	Factoring - common factors, trinomials and difference of squares; solving by factoring	7 days Tuesday February 1		
4	Radicals & Exponents -simplifying radicals, four basic operations with radicals, rationalize denominators, and rational exponents	7 days Thursday February 10		
5	Probability	4 days Wednesday February 16		
	MIDTERM - must be written on or before	**Friday** **February 18**		
6	Co-ordinate Geometry I - Line Segments - distance between points, midpoints, slope, parallel and perpendicular line segments	8 days Wednesday March 9		
7	Co-ordinate Geometry II - The Straight Line - rectangular co-ordinate system, equations of lines, graphing linear equations and inequalities	8 days Monday March 21		
8	Introductions to Relations and Functions -relations, functions, evaluating functions, linear functions, direct variation	7 days Wednesday March 30		
9	Trigonometry - Pythagorean Theorem, sin, cos, tan, applications	8 days Monday April 11		
	FINAL EXAM - 3 HOURS	**T.B.A.** (April 14-27)		

MA0110 Homework Schedule
Winter 2011

1. Review

1-3	4&5	6&7	8	Review	**Test: Wed. Jan.12**
Jan.5	**6**	**7**	**10**	**11**	

2. Polynomials

1&2	3&4	5&6	7&8	9	Review	**Test: Friday Jan. 21**
Jan.13	**14**	**17**	**18**	**19**	**20**	

3. Factoring

1&2	3	4	5	6	Review	**Test: Tuesday Feb. 1**
Jan.24	**25**	**26**	**27**	**28**	**31**	

4. Radicals and Exponents

1&2	3	4&5	6&7	8&9	Review	**Test: Thursday Feb. 10**
Feb.2	**3**	**4**	**7**	**8**	**9**	

5. Probability **Test: Wed. Feb. 16**

1&2	3&4	Review
Feb.11	**14**	**15**

Midterm Exam on Friday, February 18

6. Co-ordinate Geometry I

1	2	3	4	5	6	Review	**Test: Wed. March 9**
Feb.28	**Mar.1**	**2**	**3**	**4**	**7**	**8**	

7. Co-ordinate Geometry II

1	2	3	4	5	6	Review	**Test: Monday March 21**
Mar.10	**11**	**14**	**15**	**16**	**17**	**18**	

8. Introduction to Relations and Functions

1	2	3	4	5	Review	**Test: Wed. March 30**
Mar.22	**23**	**24**	**25**	**28**	**29**	

9. Trigonometry

1	2	3	4	5	6	Review	**Test: Monday April 11**
Mar.31	**Apr.1**	**4**	**5**	**6**	**7**	**8**	

Final Exam: (April 14-27) to be announced

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.