



**ACADEMIC FOUNDATIONS PROGRAM
GREGOIRE LAKE LEARNING CENTRE
Fall 2013**

**AFM 007 Section G
INTERMEDIATE MATH 007**

6 credits, 16 weeks, 8 hours/week

AFM 007 will apply a review of whole numbers, fractions and decimals to all operations (addition, subtraction, multiplication, division) on integers, signed fractions and signed decimals including order of operations. Students will apply their number sense to the solving of ratio, proportion and percent applications as well as the interpretation of data presented in various charts or graphs. Algebra will be explored through the solving of one step linear equations. Perimeter and area of two dimensional shapes will be explored and applied to the volume of three dimensional figures, with a focus on circles and triangles.

Prerequisite: Math 006 (AFM 006) or placement test or permission of Program Chair

Class Hours: Monday: 9:00 – 11:00 and 12:00 – 1:00;
Wednesday: 1:00 – 4:00
Thursday: 9:00 – 11:00

Instructor: Melodee Helgason
Telephone: 334-2559 Office
838-4361 Cell (leave message)
E-Mail: melodee.helgason@keyano.ca

Office Hours: Monday and Thursday 11:00 – 12:00 and 3:30 – 4:00
Tuesday and Wednesday 12:00 – 1:00

Required Textbooks

- *Basic College Mathematics with Early Integers*, 2nd Edition by Bittinger and Penna
- Binder, lined paper

Student Learning Outcomes:

Upon successful completion of Math 007, students should be able to:

1. Number strand

- a. Perform four operations (addition, subtraction, multiplication & division) with integers, decimals and fractions
- b. Solve applied problems involving the four operations on integers, decimals and fractions
- c. Simplify expressions involving integers, fractions and decimals using the rules of order of operations
- d. Solve applied problems involving proportions
- e. Solve applied problems involving percent

2. Statistics and Probability strand

- a. Find the average (mean), median and mode of a set of numbers and solve applied problems involving mean, median and mode.
- b. Extract and interpret data from tables, pictographs, bar graphs, line graphs and circle graphs

3. Shape and Space strand

- a. Classify angles according to their measure
- b. Measure and draw angles, using a protractor
- c. Classify triangles according to the length of their sides (equilateral, isosceles or scalene) and the measure of their interior angles (right, obtuse or acute)
- d. Solve problems involving the radius, diameter, and circumference of a circle
- e. Estimate the area of a surface
- f. Solve problems involving the area of triangles, parallelograms and circles
- g. Estimate the volume of a 3-D object
- h. Solve problems involving the volume of prisms and cylinders

4. Patterns and Relations strand

- a. Solve one step equations involving integers, fractions and decimals



Evaluation:

This grade will be based on the following:

Assignments	25%
Unit Tests	50%
Final Exam	<u>25%</u>
Total	100%

.Grading System:

Posted in Learning Centre: Keyano College Grading System: Credit Calendar page 32

The student must attain a Grade in excess of 64%, or a 1.7 on the 4.0 Grade Scale, to assure progression.

Classroom Expectations:

In order to make the learning center a happy and productive place to learn, each student is expected to:

- attend classes regularly;
- arrive to school on time;
- phone the learning center to notify the instructor should she/he be unable to attend classes that day;
- limit the use of the school telephone to short important phone calls;
- keep her/his work table tidy;
- wash her/his own dishes;
- wear indoor shoes or slippers to help keep the classroom floors clean;
- show respect to fellow students and contribute to maintaining a peaceful learning atmosphere.

Student Rights and Responsibilities

Students should be aware of their rights and responsibilities as laid out in the *Keyano College Credit Calendar 2013-2014*, on pages 37-40, or as included in the student package.

In order to “refrain from unduly disturbing, disrupting or otherwise interfering with studies...” (*KCCC, 2013/2014, p. 37*), students should turn cell phones and pagers off when they come to class, and refrain from bringing children or other visitors to class.

Learner Assistance Program (LAP):

If you have been diagnosed with a learning disability in the past, or feel that you would benefit from some assistance from a disabilities counselor, please call 780-792-5608 to book an appointment. In order to provide effective service, students are advised to address learner assistance issues at the beginning of the semester. Services and accommodations are intended to assist students in the course, while maintaining the academic



standards of Keyano College. The LAP can be of assistance to you in disclosing your disability to your instructor, receiving accommodations, and your overall success at Keyano College.

Additional Information:

Assignments

Assignments must be submitted in a timely fashion. You need to complete the course in one semester, so any postponement will cause delays later in the semester. If you become too far behind you will not be successful this year.

In-class Assignments/Tests

There will be no re-writes. If you must be absent, be sure to phone me to let me know before class. You will then be expected to make the assignment/test up within 24 hours of your return or a grade of zero will be given. If you are away for an extended period of time, with a legitimate reason, you will be excused from the test. **It is your responsibility to inform me of absences and to arrange make-up tests.**

Plagiarism

Taking the words or ideas of another person and stating them as your own is plagiarism. When it is necessary to borrow ideas from others, you must give credit to the lender. You may **never** use another student's work as your own. If you are resubmitting one of your own, previously marked papers, it must be with my approval. **Students who plagiarize will be given a grade of zero.**

Final Examination

All final exams must be written on the specified examination date unless the conditions listed in the Keyano College Calendar under "Deferred Exams" apply.

Proposed Schedule

WEEK	DATES	CHAPTER	TOPIC	TESTS
1 - 2	Sept 4 - 11	1	Whole Numbers – Addition; Subtraction; Multiplication; division; rounding & estimating. Exponents.	Sept 11
2 - 3	Sept 12 - 20	2	Integers – Addition; subtraction; Multiplication; division. Order of Operations.	Sept 20
4 -5	Sept 23 - 30	3	Fractions –Dividing; multiplying; Simplifying. Applications.	Sept 30
5 - 6	Oct 1 - 11	4	Fractions / Mixed Numerals ; LCM; Addition; Subtraction; order of Operations.	Oct 11
7 -8	Oct 14 - 25	5	Decimals – Order, rounding, addition, subtraction, multiplication, division. Converting from fraction to decimal.	Oct 25
9	Oct 28 - Nov 1	6	Ratio and Proportion – ratios, unit prices, proportions. Applications.	Nov 1
10	Nov 4 - 8	7	Percentages – percents and fractions; percent equations; sales tax; interest.	Nov 8
11 - 12	Nov 11 - 20	8	Data, graphs and Statistics – averages, medians, modes. Tables, bar, line graphs, circle graphs.	Nov 20
12 - 13	Nov 21 - 27	9	Measurement – Linear – American / Metric; weight and mass; volume; time and temperature.	Nov 27
13 - 14	Nov 28 - Dec 6	10	Geometry – perimeter, Area; circles, volume, angles, triangles, square roots, Pythagoras' theory.	Dec 6
15	Dec 9 - 12	11	Algebra – introduction, solving equations. Applications. Review if possible	No Quiz
16	Dec 13 - 18	Exam Week		To Be Scheduled

Please Note:

This course outline may be modified at the instructor's discretion to facilitate unforeseen time constraints

Important College Dates:

FALL	Tuesday, September 3, 2013	<ul style="list-style-type: none"> • Orientation Day
	Wednesday, September 4, 2013	<ul style="list-style-type: none"> • Fall Semester begins
	Tuesday, September 10, 2013	<ul style="list-style-type: none"> • Last day to add course(s) for academic programs • Fall Semester fees due
	Wednesday, September 11, 2013	<ul style="list-style-type: none"> • Winter late fee applied
	Tuesday, September 17, 2013	<ul style="list-style-type: none"> • Last day to drop for academic programs
	Friday, September 20, 2013	<ul style="list-style-type: none"> • Fall Awards application deadline
	Friday, October 11, 2013	<ul style="list-style-type: none"> • Last day to withdraw from course(s) with 50% refund of tuition fees
	Monday, October 14, 2013	<ul style="list-style-type: none"> • College closed (Thanksgiving Day)
	Friday, October 25, 2013	<ul style="list-style-type: none"> • Last day to withdraw without academic penalty
	Monday, November 11, 2013	<ul style="list-style-type: none"> • No classes (Remembrance Day)
	Tuesday, December 3, 2013	<ul style="list-style-type: none"> • Fall Awards Celebration
	Thursday, December 12, 2013	<ul style="list-style-type: none"> • Last day of classes for Academic Upgrading
	December 13 - 18, 2013	<ul style="list-style-type: none"> • Final Exams for Academic Upgrading
Friday, December 20, 2013	<ul style="list-style-type: none"> • End of Fall Semester 	



Authorization:

This course outline has been authorized by the following individuals:

M. Helgason _____
(Instructor)

Janet Lowndes _____
(Chair)

Guy Harmer _____
(Dean)

Course Outline Effective Date: September 4, 2013