AFM 007F, Intermediate Math 007

6 credits, 16 weeks, 8 hours lecture

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 the 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.

Prerequisites: Completion of Math 006 or equivalent or permission from the Program Chair.

Instructor

Instructor Name: Maureen Clarke
Office location: FC-119
Phone number: (780) 697-3767
maureen.clarke@keyano.ca

Office Hours

Monday 8:30 – 9:00; 3:00 – 3:50
Tuesday 8:30 – 9:00; 3:00 – 3:50
Wednesday 3:00 – 3:50
Thursday 3:00 – 3:50 Day 0:00 – 0:00

Hours of Instruction

Monday 9:00 – 9:50; 10:00 – 10:50
Tuesday 9:00 – 9:50; 10:00 – 10:50
Wednesday 9:00 – 9:50; 10:00 – 10:50
Thursday 9:00 – 9:50; 10:00 – 10:50

Required Resources

Text: Basic College Mathematics with Early Integers: Pearson Education, Inc., Toronto

Course Outcomes

Upon successful completion of AFM 007, students will be able to

- understand and apply mathematical rules appropriately
- comprehend and correctly use terminology associated with course topics
- add, subtract, multiply and divide integers with and without a calculator
- add, subtract, multiply and divide signed fraction with and without a calculator
- add, subtract, multiply and divide signed decimals with and without a calculator
- solve ratio problems
- solve percent problems
- interpret charts and graphs
- solve one-step linear equations
- calculate perimeter and area of two dimensional shapes
- calculate volume of three dimensional shapes, including circles and triangles
- utilize a problem solving model to generate a set of ordered steps to solve problems
- organize written work effectively to facilitate problem solving
- relate learned mathematical rules and skills to new concepts

Evaluation

Assignments 30%
Quizzes/Tests 20%
Midterm Exam 25%
Final Exam 25%
Total 100%

The minimum pre-requisite for progression is 1.7 (refer to Grading System below)

Grading System

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>4.0 Scale</th>
<th>Percent</th>
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<tbody>
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<td>Excellent</td>
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<tr>
<td></td>
<td>4.0</td>
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<td>85 – 89</td>
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<tr>
<td>Failure</td>
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Proposed Schedule of Topics

Chapter 1: Whole Numbers Jan 5 - 16
Chapter 2: Integers Jan 19 - 29
Chapter 3: Fraction Notation: Multiplication and Division Jan 30 – Feb 10
Chapter 4: Fraction Notation and Mixed Numerals Feb 11 - 19
Chapter 5: Decimal Notation Mar 2 - 10
Midterm Exam TBA

Chapter 6: Ratio and Proportion Mar 11 - 18
Chapter 7: Percent Notation Mar 19 - 30
Chapter 8: Data, Graphs, and Statistics Mar 31 – Apr 6
Chapter 9 Measurement Apr 7 - 9
Chapter 10: Geometry Apr 13 - 15
Chapter 11: Algebra: Solving Equations and Problems Apr 16 - 21
Review: Apr 22
Final Exam TBA
Please Note:
Date and time allotted to each topic is subject to change. It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College Credit Calendar.

Performance Requirements

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and / or notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person’s work as one’s own
- The use of unauthorized aids in assignments or examinations (cheating)
- Collusion or the unauthorized collaboration with others in preparing work
- The deliberate misrepresentation of qualifications
- The willful distortion of results or data
- Substitution in an examination by another person
- Handing in the same unchanged work as submitted for another assignment

Penalties for academic offences range from a verbal reprimand to dismissal from the College, and in certain circumstances may involve legal action.

Specialized Supports

Counselling and Disability Services

Counselling Services provides a wide range of specialized counselling services to prospective and registered students, including personal, career and academic counselling.

SKILL Centre

The SKILL Centre is a learning space in the Clearwater Campus at Keyano College where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff.

The SKILL Centre, through a variety of delivery methods, provides assistance in skill development to Keyano students. Assistance is provided by instructors, staff and student tutors. Individuals wishing to improve their mathematics, writing, grammar, study, or other skills, can take advantage of this unique service.
Authorization

This course outline has been reviewed and approved by the Program Chair.

Maureen Clarke, Instructor

Lisa Turner, Chair

Guy Harmer, Dean

Signed copies to be delivered to:
Instructor
Registrar's Office