Entry Math 6 (AFM 006)

6 credits, 16 weeks, 8 hours lecture/week

AFM 006 will cover all four operations (addition, subtraction, multiplication, division) on whole numbers, fractions and decimals including order of operations. An introduction to the language of algebra and the solving of one step linear equations, calculating the perimeter and area of basic polygons and the interpretation of graphed data will be explored.

Instructor

Instructor: Allen Fung
Office location: Janvier Learning Centre / CC 205 W
Office number: 780 559 2047
Mobile number: 780 215 4877
E-mail: allen.fung@keyano.ca

Office Hours

Monday 12:00 – 1:00pm / 3:00 - 4:00pm
Tuesday, Wednesday, and Thursday 12:00 – 1:00pm

Hours of Instruction

Monday – Thursday 1:00 – 3:00pm

Required Resources


Course Outcomes

Upon successful completion of Math 006, students will be able to:

Number Strand
- accurately perform the operations of addition, subtraction, multiplication and division using whole numbers, fractions and decimals (without the use of technology).
- create and solve problems in context that involve the four operations using whole numbers, fractions, and decimals.
- apply the rules for the order of operations to solve multi-step problems using whole numbers, fractions and decimals.

Patterns and Relations Strand
- determine the pattern rule to make predictions about subsequent elements.
- represent and describe patterns and relationships using line graphs and tables.
- create a table of values to record and reveal a pattern to solve a given problem.
• express a given problem as an equation in which a letter variable is used to represent an unknown number.
• solve problems involving single-variable, one-step equations with whole number co-efficients.

**Shape and Space Strand**
• demonstrate an understanding of measuring length using mm, cm, and m units.
• apply a formula for determining the perimeter of polygons and the area of rectangles.

**Statistics and Probability Strand**
• create a line graph from a given table or set of data and interpret to draw conclusions.

**Evaluation**
Assignments 50%
Quizzes/Tests 10%
Midterm Exam 15%
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>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>4.0</td>
<td>96 – 100</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>90 – 95</td>
</tr>
<tr>
<td></td>
<td>3.7</td>
<td>85 – 89</td>
</tr>
<tr>
<td>Good</td>
<td>3.3</td>
<td>81 – 84</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
<td>77 – 80</td>
</tr>
<tr>
<td></td>
<td>2.7</td>
<td>73 – 76</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>2.3</td>
<td>69 – 72</td>
</tr>
<tr>
<td><strong>Minimum Prerequisite</strong></td>
<td>2.0</td>
<td>65 – 68</td>
</tr>
<tr>
<td>Poor</td>
<td>1.3</td>
<td>55 – 59</td>
</tr>
<tr>
<td>Minimum Pass</td>
<td>1.0</td>
<td>50 – 54</td>
</tr>
<tr>
<td>Failure</td>
<td>0.0</td>
<td>0 – 49</td>
</tr>
</tbody>
</table>
### Proposed Schedule of Topics

<table>
<thead>
<tr>
<th>WEEK</th>
<th>CHAPTER</th>
<th>TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>1</td>
<td><strong>Whole Numbers</strong> – Place value</td>
</tr>
<tr>
<td>2 – 3</td>
<td>2</td>
<td><strong>Whole Numbers</strong> – Addition; Subtraction;</td>
</tr>
<tr>
<td>4 – 5</td>
<td>3</td>
<td><strong>Whole Numbers</strong> – Multiplication; Division;</td>
</tr>
<tr>
<td>5 – 6</td>
<td>4</td>
<td><strong>Whole Numbers</strong> – Factoring</td>
</tr>
<tr>
<td>7 – 8</td>
<td>5</td>
<td><strong>Whole Numbers</strong> – Rounding &amp; Estimating. Exponents.</td>
</tr>
<tr>
<td>8 – 9</td>
<td>6</td>
<td><strong>Fractions</strong> – Understanding Fractions: Addition</td>
</tr>
<tr>
<td>10 – 11</td>
<td>7</td>
<td><strong>Fractions</strong> – Subtraction: Multiplying; Dividing Simplifying. Applications</td>
</tr>
<tr>
<td>11 – 12</td>
<td>8</td>
<td><strong>Fractions / Mixed Numerals</strong>: LCM; Addition; Subtraction; order of Operations.</td>
</tr>
<tr>
<td>12 – 13</td>
<td>9</td>
<td><strong>Decimals</strong> – Order, rounding, addition, subtraction, multiplication.</td>
</tr>
<tr>
<td>13 – 14</td>
<td>10</td>
<td><strong>Decimals</strong> – Division. Converting from fraction to decimal.</td>
</tr>
<tr>
<td>14 – 15</td>
<td>11</td>
<td><strong>Geometry</strong> – perimeter, naming angles. Completion of outstanding work / Review</td>
</tr>
<tr>
<td>16</td>
<td><strong>Exam Week</strong></td>
<td></td>
</tr>
</tbody>
</table>

**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.

Allen Fung, Instructor

Lisa Turner, Chair               Date Authorized

Guy Harmer, Dean               Date Authorized

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