BUS 110E – Business Mathematics  
3 credits, 6 weeks, 6 hours

Students will cover (a) a review of basic algebra, ratio and proportion, and linear systems. (b) The mathematics of Business Management including the calculation of depreciation, discounts, simple interest and mark-up: and the mathematics of finance which includes compound interest, future value, present value and discounted cash flows. An emphasis on the use of word problems and case studies will be stressed to bring the real world usefulness of the material to light.

*Prerequisites: Math 30/33 or Math 30-2*

**Instructor**
Iggy Goremucheche  
S111A  
7780-791-8937  
Farai.goremucheche@keyano.ca

**Office Hours**
Monday  16:00 – 18:00hrs  
Wednesday  16:00 – 18:00hrs

**Hours of Instruction**
Monday  18:30 – 21:30hrs  S216  
Thursday  18:30 – 21:30hrs  -  S216

**Required Resources**

Texas Instruments BA II Plus calculator  
Note: these are the only calculators acceptable for use in the exams.

**Course Outcomes**

Students will be able to:
- Apply ratios, proportions and percentages to solve a variety of business problems
- Determine trade discounts, cash discounts, mark up and mark down
- Solve problems involving simple interest and partial payments
- Analyze problems involving the time value of money and compound interest using formulae and financial calculator
- Analyze annuities and their applications to loans, bonds, investments and mortgages using formulae and financial calculator.
- Use a financial calculator to solve problems involving cash flows, NPV and FV of investments.
- Evaluate alternative investments using cash flow analysis.
Evaluation

Class Exercises  30%
Assignments      30%
Final Exam       40%
Total            100%

The minimum standard for passing this course is an overall grade of D (50%).

Students Rights and Responsibilities

Please also refer to pages 36 through 40 of the Credit Calendar (http://digital.turn-page.com/i/283052)

1. **Cellular Phones** are a distraction to both your fellow students and the class instructor. All cellular phones are to be turned off, or at minimum set on silent mode prior to the beginning of class time.

   If a student is observed using a cellular phone at any time during class, i.e. sending or reading text messages, they will be asked to leave the classroom for the remainder of class time.

2. **Class attendance** is useful for two reasons. First, class attendance maximizes a students' learning experience. Second, attending class is a good way to keep informed of matters relating 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.

3. **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 wilful distortion of results or data
   - Substitution in an examination by another person

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

4. **Accommodation for Students with Disabilities** - The College will provide reasonable accommodation to students with disabilities in order to promote academic success. If you require accommodation, contact the Learner Assistance Program Office at 792-5608 to initiate the process for documenting, assessing, and implementing your individual accommodation needs. In addition, tutoring services are available at the SKILL Centre (Room 119)

5. **Success Criteria** - To receive a passing grade (a grade score of D or higher) in this class, a total average mark of 50% (on all work) must be achieved.
# Proposed Schedule

## TOPICS TO BE COVERED AND IMPORTANT DATES:

<table>
<thead>
<tr>
<th>Week of:</th>
<th>TOPIC</th>
<th>REQUIRED READING</th>
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<tbody>
<tr>
<td>12 May</td>
<td>Review and Applications of Basic Mathematics</td>
<td>Chapter 1&amp;2</td>
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<tr>
<td></td>
<td>Ratios and Proportions</td>
<td>Chapter 3</td>
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<tr>
<td>19 May</td>
<td>Mathematics of Merchandising</td>
<td>Chapter 4</td>
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<tr>
<td></td>
<td>Simple Interest</td>
<td>Chapter 6&amp;7</td>
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<tr>
<td>26 May</td>
<td>Compound Interest: Future and Present Value</td>
<td>Chapter 8&amp;9</td>
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<tr>
<td></td>
<td>Annuities: Future and Present Value</td>
<td>Chapter 10 &amp; 11</td>
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<tr>
<td>2 June</td>
<td>Ordinary Annuities: Periodic Payment, Number of Payments, and Interest Rates</td>
<td>Chapter 11</td>
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<tr>
<td></td>
<td>Annuities Due</td>
<td>Chapter 12</td>
</tr>
<tr>
<td>9 June</td>
<td>Mortgages</td>
<td>Chapter 14</td>
</tr>
<tr>
<td>16 June</td>
<td>Review</td>
<td>Review Paper</td>
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<tr>
<td></td>
<td>Final Exam</td>
<td>All Chapters Covered</td>
</tr>
</tbody>
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**NOTES:**
- This proposed schedule may be subject to change to facilitate unforeseen time constraints and circumstances
Assignments

<table>
<thead>
<tr>
<th>DUE DATE</th>
<th>PROBLEM SET</th>
<th>MARKS</th>
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<tbody>
<tr>
<td>14 May</td>
<td>Chapt 1</td>
<td>Class Exercise Qns 3, 5, 7, 9, 11</td>
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<tr>
<td></td>
<td>Chapt 2</td>
<td>Home work Qns 3, 7, 11, 13</td>
</tr>
<tr>
<td>19 May</td>
<td>Chapt 3</td>
<td>Class Exercise Qns 1, 3, 7, 11, 13</td>
</tr>
<tr>
<td>21 May</td>
<td>Chapt 4</td>
<td>Home work Qns 3, 5, 7, 13, 15</td>
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<tr>
<td>26 May</td>
<td>Chapt 6</td>
<td>Class Exercise Qns 3, 7, 11, 15, 17</td>
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<td></td>
<td>Chapt 7</td>
<td>Homework Qns 3, 5, 7, 11, 15</td>
</tr>
<tr>
<td>2 June</td>
<td>Chapt 8</td>
<td>Class Exercise Qns 5, 7, 13, 15</td>
</tr>
<tr>
<td></td>
<td>Chapt 9</td>
<td>Homework Qns 3, 5, 7, 9, 11</td>
</tr>
<tr>
<td>9 June</td>
<td>Chapt 10</td>
<td>Class Exercise Qns 5, 13, 15</td>
</tr>
<tr>
<td></td>
<td>Chapt 11</td>
<td>Homework Qns 1, 3, 5, 7</td>
</tr>
<tr>
<td>16 June</td>
<td>Review</td>
<td>Mock Revision</td>
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</tbody>
</table>

Assignments are due by the **BEGINNING** of the class on the date specified, unless arrangements have been made prior to that assignment’s due date.

Fifteen (3) marks will be deducted for each day, or part thereof, that an assignment is late. Assignments will not be accepted more than three (3) days late, and a mark of zero will be given for that assignment.

All assignments are to be handed in hard copy, AND soft copy on moodle.

Wherever appropriate, show your work. Marks will be given for the process, not for just the answer. It is important to show **ALL** your calculations.

Format and presentation count.

**ENGLISH, GRAMMAR AND NEATNESS ALWAYS COUNT!**
Authorization
This course outline has been reviewed and approved by the Program Chair.

__________________________________________
Iggy Goremuchoche, Instructor

__________________________________________
Gina Langager, Chair                        Date Authorized

__________________________________________
Guy Harmer, Dean                            Date Authorized

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