



**I. COURSE DESCRIPTION:**

This course provides students with the ability to apply mathematics in their daily lives. Students will learn how to reason and interpret with information involving mathematics and numbers. Students will develop skills in problem solving and analysis, which can be applied to personal decision making and to the evaluation of concerns in society.

**II. LEARNING OUTCOMES****A. Learning Outcomes:**

Upon successful completion of this course, students will demonstrate the ability to:

1. Represent mathematical information symbolically, visually, numerically, and verbally.
2. Interpret mathematical models such as formulas, graphs, and tables, and draw inferences from them.
3. Use arithmetical, algebraic, and statistical methods to solve problems.
4. Think critically about quantitative issues that confront them in their personal lives and as citizens.
5. Recognize that mathematical and statistical methods have limits.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE  
(Continued):**

1. Represent mathematical information symbolically, visually, numerically, and verbally.

***Potential elements of the performance:***

- Show the relationship of a quantity with respect to another by using words, a table, an equation, a picture, or a graph.
  - Apply the most appropriate representation method for the situation.
2. Interpret mathematical models such as formulas, graphs, and tables, and draw inferences from them.

***Potential elements of the performance:***

- Manipulate and analyze formulas of linear and nonlinear relations.
- Use a variety of types of graphs and tables to obtain information.
- Predict some aspect of the behaviour of a particular phenomenon or process.

3. Use arithmetical, algebraic, and statistical methods to solve problems.

***Potential elements of the performance:***

- Apply guidelines for problem solving to specific situations.
  - Formulate basic algebraic, graphical, or statistical solutions to problems.
4. Think critically about quantitative issues that confront them in their personal lives and as citizens.

***Potential elements of the performance:***

- Examine and evaluate scientific claims.
  - Analyze the validity, accuracy, and/or conclusions of the statistics in the news media, opinion polls, or reports of research.
5. Recognize that mathematical and statistical methods have limits.

***Potential elements of the performance:***

- Recognize that some scientific claims may be biased or inaccurate.
- Give examples of the possible inaccuracy of estimates in measurement due to biases and/or random and systematic errors.
- Examine methods used with respect to their appropriateness for the given situation.

**III. TOPICS:**

1. Math in our Lives
2. Consumer Math
3. Statistics
4. Math in the Media

**IV. LEARNING ACTIVITIES**

TOPIC #	TOPIC DESCRIPTION	REFERENCES ASSIGNMENTS
1	Math in our Lives	Chapters 1, 2, 3, 4, 5, 12 – 3 Chapters 18, 19
2	Consumer Math	Chapters 6, 7, 17
3	Statistics	Chapter 21
4	Math in the Media	Print, Audio, and Visual Media Sources

**V. REQUIRED RESOURCES / TEXTS / MATERIALS:**

1. Reference to Mathematics: A Guide for Everyday Math (2003) Cleave and Hobbs, Prentice Hall.
2. A scientific calculator is required. The Sharp EL-531 is recommended.

**VI. EVALUATION PROCESS/GRADING SYSTEM:****MAJOR ASSIGNMENTS AND TESTS**

Regular topic tests will contribute a minimum of **60%** of the overall mark.

While regular tests will normally be scheduled and announced beforehand, there may be an unannounced test on current work at any time. Such tests, at the discretion of the instructor, may be used for up to **30%** of the overall mark.

The instructor will provide you with a list of test dates and other required evaluation information for your class section. Tests may be scheduled out of regular class time.

**ATTENDANCE**

It is your responsibility to attend all classes during the semester. Research indicates there is a high correlation between attendance and student success.

If you are absent from class, it is your responsibility to find out what work was covered and assigned and to complete this work before the next class. Your absence indicates your acceptance of this responsibility.

**Unexcused absence from a test may result in a mark of zero (“0”).** Absence may be excused on compassionate grounds such as verified illness or bereavement. On return from an excused absence, you should ask your instructor to schedule the writing of a make-up test. Failure to do so will be considered as an unexcused absence.

**METHOD OF ASSESSMENT (GRADING METHOD)**

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	Consistently outstanding	90% - 100%
A	Outstanding achievement	80% - 89%
B	Consistently above average achievement	70% - 79%
C	Satisfactory or acceptable achievement in all areas subject to assessment	60% - 69%
R	Repeat - The student has not achieved the objectives of the course, and the course must be repeated.	Less than 60%
X	A temporary grade, limited to situations with extenuating circumstances, giving a student additional time to complete course requirements ( <b>See Below</b> )	0.00

**METHOD OF ASSESSMENT (cont'd):**

CR Credit exemption

The method of calculating your weighted average will be defined by your instructor. Since grades are based upon averages, it follows that good marks in some tests can compensate for a failing mark in another test.

**Make-Up Test (if applicable)**

An "X" grade may be assigned at the end of the regular semester if you have met **ALL** of the following criteria for the course:

- an overall average between 50% and 59% was achieved
- at least 50% of the tests were passed
- at least 80% of the scheduled classes were attended
- at least 80% of quizzes and assignments were submitted
- all of the topic tests were written

If you are assigned an "X" grade, you may convert it to a "C" grade by writing a make-up test on topics agreed to by the instructor. This test will be available at the time agreed to by your instructor.

At the end of the regular term, it is your responsibility to obtain your results from your instructor and, in the event of an "X" grade, to inquire when the make-up test will be available.

The score you receive on this make-up test will replace your original test score and be used to re-calculate your weighted average. If the re-calculated average is 60% or greater, a "C" grade will be assigned. If the re-calculated average is 59% or less, an "R" grade will be assigned.

**"R" and "X" Grades at the end of the Semester**

If an "X" grade is not cleared by the specified date, it will become an "R" grade. Except for extenuating circumstances, an "X" grade in Math will not be carried into the next semester.

**"R" Grades during the Semester**

A student with a failing grade and poor attendance (less than 80% attendance) may be given an "R" at any time during the semester.

**VII. SPECIAL NOTES:**

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities), are encouraged to discuss required accommodations with the professor and/or contact the Special Needs Office.

**VII. SPECIAL NOTES (continued):**

**Advanced Standing**

Students who have completed an equivalent post-secondary course must bring relevant documents to the Coordinator, Mathematics Department:

- a copy of course outline
- a copy of the transcript verifying successful completion of the equivalent course

Note: A copy of the transcript must be on file in the Registrar's Office.

**VIII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the instructor or the Prior Learning Assessment Office (E2203).