

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 AND ELEMENTS OF THE PERFORMANCE:

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

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

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

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

Potential Elements of the Performance:

- 1) Show the relationship of a quantity with respect to another by using words, a table, an equation, a picture, or a graph.
- 2) 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:

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

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

Potential Elements of the Performance:

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

Potential Elements of the Performance:

- 1) Examine and evaluate scientific claims.
 - 2) 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:

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

III. TOPICS:

1. Mathematical Methods
2. Mathematical Models
3. Problem Solving and Numbers in the Real World
4. Thinking Critically
5. Statistical Methods

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

My Math Test CD from the Bookstore
ISBN 0321557077
Prentice Hall Publishing

A scientific calculator is required.

Any additional information will be provided

V. EVALUATION PROCESS/GRADING SYSTEM:

Assigned work and/or Quizzes	20%
Tests	80%

Some minor modifications to the above percentages may be necessary.

The professor reserves the right to adjust the number of tests, practice tests, quizzes and assigned work based on unforeseen circumstances. The students will be given sufficient notice to any changes and the reasons thereof.

There will likely be four or more tests of equal value. If warranted, the professor may choose to also include surprise quizzes, class based work and/or practice tests to reinforce key concepts. **My Math Test** assignments will be included, and will contribute toward your final mark in the course.

In order to pass the course, **students must achieve a passing average on all of the tests. Each and every test is mandatory** and an absence from a test without prior approval may result in a zero grade for that test.

If the professor chooses to have in class quizzes and / or class based work, absence may also result in zero grades for these activities.

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 professor to schedule the writing of a make-up test. Failure to do so will be considered as an unexcused absence.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	
A	80 – 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

VI. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers will not necessarily be granted admission to the room.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.