

I. COURSE DESCRIPTION:

This is the second level mathematics course for the pre-health program. Building on the concepts explored in the first course, the focus is on quadratic, exponential, and logarithmic functions. Also explored are a variety of data analysis techniques.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Solve quadratic equations by factoring, using quadratic formula, and graphically.
2. Graph exponential and logarithmic equations.
3. Solve exponential and logarithmic equations.
4. Interpret, analyse, and summarize data graphically and numerically using a variety of tools and strategies.

III. TOPICS:**Text Reference**

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| 1. Factoring | 8.1 – 8.4 |
| 2. Quadratic Equations | 11.1 – 11.5 |
| 3. Exponential and Logarithmic Functions | 12.1 – 12.5 |
| 4. Introduction to Data Analysis | 17.1 – 17.5 |

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

1. Washington, A. J., Triola, M.F., Reda, E. E. (2008). Introduction to technical mathematics (5th ed.). Toronto: Pearson Addison Wesley
2. Calculator: *(Recommended)* SHARP Scientific Calculator EL-531. *The use of some kinds of calculators, cell phones, and other electronic devices may be restricted during tests.*

V. EVALUATION PROCESS/GRADING SYSTEM:

Evaluation Methods:

Unit 1: Quadratic Equations

5 Quizzes (7% each) – 35%

Unit 2: Exponential and Logarithmic Functions

4 Quizzes (8-9% each) - 35%

Unit Test – 15%

Unit 3: Introduction to Data Analysis

4 Quizzes (7.5% each) – 30%

The following semester grades will be assigned to students:

| Grade | <u>Definition</u> | <i>Grade Point Equivalent</i> |
|--------------|--|-------------------------------|
| A+ | 90 – 100% | 4.00 |
| A | 80 – 89% | |
| 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| W | Student has withdrawn from the course without academic penalty.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.

VII. COURSE OUTLINE ADDENDUM:

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