

THE SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY
SAULT STE. MARIE, ON



COURSE OUTLINE

Course Title: Every Day Math

Code No.: MTH132-3

Semester: 1

Program: General Arts and Science

Author: Mathematics Department

Date: Fall 2000

Previous Outline Dated: Fall 1999

Approved: _____
Dean Date

Total Credits: 3 Prerequisite(s):

Length of Course: 16 weeks Total Credit Hours: 48

Copyright © 2000 The Sault College of Applied Arts & Technology
Reproduction of this document by any means, in whole or in part, without the prior written permission of The Sault College of Applied Arts & Technology is prohibited.
For additional information, please contact Judith Morris, School of Continuous Learning, (705) 759-2554, Ext.516

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 NUMBER | TOPIC DESCRIPTION | REFERENCES ASSIGNMENTS |
|--------------|-------------------|---|
| 1 | Math in our Lives | Handouts, Web-CT, Internet Assignment #1 |
| 2 | Consumer Math | Handouts, Web-CT Test # 1 |
| 3 | Statistics | Handouts, Web-CT Test # 2 |
| 4 | Math in the Media | Print, Audio, and Visual Media Sources Assignment # 2 |

V. REQUIRED RESOURCES / TEXTS / MATERIALS:

There is no required textbook for this course. There will be a variety of handouts distributed in class. Students should make use of reference material, such as, library books, newspapers, magazines, the Internet, radio, television, and any other media available.

A scientific calculator is required. The Sharp EL-531L is recommended.

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

| Evaluation Tool | Weight | Due Date |
|-----------------------------------|---------------|--|
| In-Class and Homework Assignments | 30% | Ongoing throughout the semester |
| Test # 1 | 25% | 2000 10 12 |
| Test #2 | 25% | 2000 11 30 |
| Group Presentation | 20% | Topic Selection 2000 11 02 Outline 2000 11 16 Presentations 2000 12 05 to 2000 12 14 (Schedule to be determined) |

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)

| | | |
|--------|---|--------------|
| 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%) |
| X or R | A temporary grade, limited to situations with extenuating circumstances, giving a student additional time to complete course requirements (See below) | (50% - 59%) |
| R | Repeat - The student has not achieved the objectives of the course, and the course must be repeated | (0% - 59%) |
| 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:

- 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.

Every Day Math
COURSE NAME

MTH132
CODE NO.

“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.

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).