

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: MATHEMATICS
Code No.: MTH 113-3
Program: FORESTRY S> GEOLOGY TECHNICIANS
Semester: ONE
Date: JUNE 1988
Author: K. PELEW

New:

Revision: X

APPROVED:

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Chairperson



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CALENDAR DESCRIPTION

MATHEMATICS

MTH 113-3

Course Name

Course Number

PHILOSOPHY AND GOALS:

The objectives of this course include the review of the basic operations of algebraic expressions and the solutions to systems of linear equations.

A survey of plane and solid geometry will enable the student to determine areas, volumes and weights for a variety of forms including cylinders, cones and pyramids.

METHOD OF ASSESSMENT (GRADING METHOD):

Periodic tests and daily assignments based on material in course outline will be given during the semester. A final exam and a make-up test will be given at the discretion of the instructor.

The final mark will be based on four unit tests, one from each topic, each representing 25% of the final mark.

GRADING

- A+= 90-100%
- A = 80-89%
- B = 65-79%
- C = 55-64%
- R = 0-54%

A passing grade will be based on a minimum grading of 55%. Students obtaining grading of 45-55% may be allowed to complete a supplementary examination. However, only students having satisfactory attendance records will be considered for the supplementary examination.

TEXTBOOK(S):

"Essentials of Mathematics"; Fourth Edition, (Person)

OBJECTIVES;

The basic objective is for the student to develop an understanding of the methods studied, knowledge of the facts presented, and an ability to use these in the solution of problems. For this purpose, exercises are assigned to reinforce concepts learned, and to show the relevance of these concepts to the student's needs in facilitating computations in the Forestry course. Tests will reflect the sort of work contained in the assignments. The level of competency demanded is the level required to obtain an overall passing average on the tests. The material to be covered is listed on the following page.

TOPIC NO,	PERIODS	TOPIC DESCRIPTION	REFERENCES
		<u>Estimations, Dimensional Analysis and Metrication</u>	
		Approximate numbers and rounding off procedures - scientific notation	Person Ch. 32
		Dimensional analysis for conversion between English and/or SI units	pp. 500-510 pp. 494-499
		The Metric System	
		<u>Plane Geometry</u>	
		Definitions and theorems involving triangles and other polygons	Person Ch. 24-27 pp. 415-460
		Definitions and theorems of the circle	Heywood
		practical problems	pp. 415-427
		Basic constructions if time permits	
11		<u>Solid Mensuration</u>	
		Mensuration of plane figures	Person
		Mensuration of solid figures, cubes, cylinders, pyramids, cones, spheres, paraboloids, applications and formulae	Ch. 28-31 pp.461-493
17		<u>Review of Elementary Algebra</u>	
		Simplification (bracket removal)	Person
		Basic Operations (monomial)	Ch. 6-11
		Special products and factoring	pp. 81-180
		Operations involving algebraic expressions and fractions (polynomials)	
		Solutions and properties of linear equations	
		Applied Word Problems	
		Formulae Manipulation	
TOTAL HOURS	42	(+4 1-HOUR TESTS) = 46 PERIODS)	

GRADES

Each Mathematics grade is based upon a weighted average of test scores on the following basis:

90-100%	A+
80%-89%	A
65%-79%	B
55%-64%	C
45%-54%	I, X, OR R (See #5 & 6)
0% -44%	R

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. If there are extenuating circumstances, an instructor can make an exception and assign an "I" or "X" grade even if the average is below 45%.

TESTS

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

At the discretion of the instructor, there can be a final test which can be used for up to 30% of the overall mark. Anything included in the work of the semester is fair game on such a final test.

ABSENCE FROM CLASS

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

TO THE MATHEMATICS STUDENT..continued

TEST ABSENCE

Unexcused absence from a scheduled test will result in a zero mark. Absence may be excused on compassionate grounds such as verified illness or bereavement. On return from an excused absence, you should ask your instructor about writing a make-up test.

If your instructor uses short unannounced tests, the following will apply. Unexcused absence from such a test will result in a zero mark. If absence from such a test is excused, then, at your request, the marks for that test will be excluded from the calculation of your course average.

MAKE-UP PERIOD (IF APPLICABLE)

An "X" grade may be assigned at the end of the regular semester if you have achieved an overall average between 45%-54% and your attendance and effort on the course have been satisfactory. Satisfactory attendance and effort will include writing all the topic tests and attending at least ~80% of the scheduled classes. If you are assigned an "X" grade, you may convert it to a "C" grade by passing a make-up test on the whole course. This test will be available only at the time specified by your instructor. At the end of the regular term, it is the student's responsibility to obtain his/her results from his/her instructor and, in the event of an "X" grade, to inquire when the make-up test will be available. At the discretion of the instructor, a topic make-up test may be used instead of an overall test in special circumstances. No student will be permitted more than one such topic make-up test.

"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 carry on 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.