SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

STATISTICS

Course Title:

MTH 270-4

Code No.:

ARCHITECTURAL AND CIVIL TECHNICIANS

Program:

FOUR

Semester:

JULY, 1985

Date:

W. MAKI

Author;

New: Revision:

APPROVED: 6U*Hs ^d/jfe
          Cl*alrp^rs   Date

CALENDAR DESCRIPTION

STATISTICS   MTH 270-4-ARC/CIVIL

Course Name   Course Number

PHILOSOPHY/GOALS:

This course will help the student to develop an understanding of
statistical techniques and procedures. They would be able to carry out
basic statistical tasks and better understand the use of statistics in
industry.

METHOD OF ASSESSMENT (GRADING METHOD):

The student will be assessed by tests. These tests will include periodic
tests based upon blocks of subject matter and may, at the instructor's
discretion include unannounced surprise tests on current work and/or a
final test on the whole course. A letter grade will be based upon a
student's weighted average of his test results. See also the mathematics
department's annual publication "To The Mathematics Student" which is
presented to the students early in each academic year.

TEXTBOOK(S);

"Statistics and Probability in Modern Life", 3rd Edition, Newmark
(Saunders Publishing)

TOPIC	PERIODS	TOPIC DESCRIPTION	REFEREIS
1	1	Introduction	pp. 3-1
		- definition, development and scope of statistics	
2	5	Descriptive Statistics	pp. 21-
		- quantative and qualitative data - discrete and continuous variables - frequency tables, histograms, frequency polygon, cumulative frequency polygon	
3	8	Measures of Location &^ Variation	pp. 65-
		- summation notations - means and weighted mean - median mode - range, variance mean deviation - standard deviation	
4	8	Probability	pp. 112
		- meaning and types of probability - probability computations - permutations - combinations dependent and independent events - (Omit Bayes Theorem)	
5	12	Probability Distributions	pp. 214
		- definition, binomial distribution only and its mean and standard deviation - normal distribution and normal approximation of the binomial - (Omit Poisson and Hypergeometric)	

TOPIC	PERIODS	TOPIC DESCRIPTION	REFEREN
6	5	<u>Sampling</u>	pp. 309
		- sampling methods, Central Limit Theorem	
7	8	<u>Estimation</u>	pp. 341
		- interval estimate of means and proportions, sample size	
8	8	<u>Linear Regression</u> *« <u>Correlation</u>	pp. 422
		- method of least squares, scatter diagrams, coefficient of correlation, standard error	