DOC. 54

# SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

## COURSE OUTLINE

Course Title:	STATISTICS
Code No.:	MTH 262-4
Program:	BUSINESS (ACC, E.D.P., F.S.M.)
Semester:	III
Date:	JUNE, 1987
Author:	J. GLOWACKI & W. MAKI

New:

Revision:

APPROVED:

z/l Chairperson

<u>/^Z</u>

Х

- 2 -

## CALENDAR DESCRIPTION

#### STATISTICS

MTH 262-4

Course Name

Course Number

### PHILOSOPHY/GOALS;

This is the first semester of a Business Statistics course and approximately one-third of the course is spent on descriptive statistics with business applications. The other two-thirds covers probability and probability distributions sampling and sampling distributions and some linear regression and correlation.

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 at the discretion of the instructor.

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

Grading: A+ = 90-100% A = 80-89% B = 65-79% C = 55-64% I = 45-54%

A passing grade will be based on a minimum grading of 55%.

## TEXTBOOK(S):

"Statistics for Management", R. Levin - 4th Edition

#### **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. Tests will reflect the sort of work contained in other 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.

262-4	- 3 -
-------	-------

TOPIC NO	). PERIODS	TOPIC DESCRIPTION	REFERENCES
1	1	Introduction Definition, history and subdivisions of statistics	Pages 1-5
2	3	<u>Frequency Tables and Graphs</u> Collection of data, samples and populations, construction of frequency tables	Pages 8-37
	2	Histograms, frequency polygons, frequency curves and ogives	Pages 38-52
3	6	Descriptive Measure Meaning of measures of central tendency, arithmetic mean, weighted mean, geometric mean, median mode	Pages 60-76 80-94
4	6	<u>Measure of Variability</u> Meaning of dispersion, range, quartiles, variance and standard deviation	Pages 110-133
5	б	<u>Probability</u> History of probability, two types of probabilities, rule of addition, rule of multiplication, joint and conditional probabilities (optional)	Pages 150-164
6	15	<u>Probability Distribution</u> Meaning of probability distribution, types of distribution, random variables Binomial distribution Poissson distribution Normal distribution	Pages 206-252
7	8	<u>Sampling</u> Purpose and definition, different types of sampling, sampling distribution, standard error	Pages 274-302
8	8	Estimation (if time permits) Point and internal estimation, criteria of good estimator, large and small sample estimation for mean and the proportions Determination of sample size	Pages 320-353