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

STATISTICS
Course Title
MTH 262-4
Code No.:
BUSINESS (ACC, E.D.P., F.S.M.)
Program:

Ill
Semester:

JUNE, 1986
Date
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Author



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: $A=80-100 \%$
$B=65-79 \%$
$C=55-64 \%$
$I=45-54 \%$
A passing grade will be based on a minimum grading of 55\%. Students obtaining grading of $45-54 \%$ may be allowed to complete a supplementary examination.' However, only students having satisfactory attendance records will be considered for the supplementary examination.

TEXTBOOK (S):
"Statistics for Management", R. Levin - 3rd 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.

TOPIC NO. PERIODS TOPIC DESCRIPTION

1

2

3

4

5

6

8

Introduction Definition, history and subdivisions of statistics

Frequency Tables and Graphs Collection of data, samples and populations, construction of frequency tables

Histograms, frequency polygons, frequency curves and ogives

Descriptive Measure
Meaning of measures of central tendency, arithmetic mean, weighted mean, geometric mean, median mode
$\frac{\text { Measure of Variability }}{\text { Meaning of dispersion, }}$ range, quartiles, variance and standard deviation

Probability
History of probability, two types of probabilities, rule of addition, rule of multiplication, joint and conditional probabilities (optional)

Probability Distribution
Meaning of probability distribution, types of distribution, random variables
Binomial distribution
Poissson distribution
Normal distribution
Sampling
Purpose and definition, different types of sampling, sampling distribution, standard error

Estimation
Point and internal estimation, criteria of good estimator, large and small sample estimation for mean and the proportions Determination of sample size

## REFERENCES

Pages 38-52

Pages 58-90

Pages 106-133

Pages 144-174

Pages 200-245

Pages 269-302

Pages 312-344

