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: <u>Ill</u>

Date: JUNE, 1984

Author: W. MAKI

New: Revision:

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          Chairperson   Date <.

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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. This should give those students taking only this semester of statistics sufficient background to apply and recognize statistical techniques in their careers and other courses.

METHOD OF ASSESSMENT (GRADING METHOD):

Periodic tests covering 2 or 3 weeks material plus any unannounced surprise tests are suggested. A final exam and a comprehensive supplemental exam may be given at semester end at the discretion of the instructor and if department or college policy is appropriate.

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	REFERENCES
1	1	<u>Introduction</u> 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	<u>Histograms</u>, frequency polygons, frequency curves and ogives	Pages 38-52

3	6	<u>Descriptive Measure</u>
		Meaning of measures of central
		    tendency, arithmetic mean, weighted
		    mean, geometric mean, median mode
			Pages 58-90

4	6	<u>Measure of Variability</u>
		Meaning of dispersion, range,
		    quartiles, variance and standard
		    deviation
			Pages 106-133

5	10	<u>Probability</u>
		History of probability, two types
		    of probabilities, rule of addition,
		    rule of multiplication, joint and
		    conditional probabilities (optional)
			Pages 144-174

6	15	<u>Probability Distribution</u>
		Meaning of probability distribution,
		    types of distribution, random
		    variable
		Binomial distribution
		Poisson distribution
		Normal distribution
			Pages 200-245

7	5	<u>Sampling</u>
		Purpose and definition, different
		    types of sampling, sampling
		    distribution, standard error
			Pages 268-302

8	8	<u>Estimation</u>
		Point and internal estimation,
		    criteria of good estimator, large
		    and small sample estimation for
		    mean and the proportions
		Determination of sample size
			Pages 312-344