

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 2, 1983
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New:

Revision:

APPROVED:

Chairperson

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Date L[^] ^ ^ / ? r *

STATISTICS
Course Name

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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.

MEHTOD 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

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 thisrpose, 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 in the following page(s).

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCES
1	1	<u>Introduction</u> Definition, history and subdivisions of Statistics	Pages 1-7
2	3	<u>Frequency Tables and Graphs</u> Collection of data, samples and populations, construction of frequency tables	Pages 9-30
	2	<u>Histograms, frequency polygons, frequency curves and Ogives</u>	Pages 30-40
3	6	<u>Descriptive Measures</u> Meaning of measures of Central Tendency, Arithmetic Mean, weighted mean, geometric mean, median mode	Pages 42-72
4	6	<u>Measure of Variability</u> Meaning of dispersion, range, quartiles, variance and standard deviation	Pages 76-95
5	10	<u>Probability</u> History of probability, two types of probabilities, rule of addition, rule of multiplication, joint and conditional probabilities, Bayes' theorem	Pages 100-132
6	3	<u>Probability Distribution</u> Meaning of Probability distribution, types of distribution, random variable	Pages 126-145
7	3	<u>Binomial Distribution</u> Mean, Standard Deviation and the use of Binomial Tables	Pages 146-154
8	2	<u>Poisson Distribution</u> Mean, Standard Deviation and calculating probabilities	Pages 155-160
9	5	<u>Normal Distribution</u> Characteristics, area under the curve, standard Normal Curve and its applications.	Pages 162-175

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCES
10	5	<u>Sampling</u> Purpose and definition, different types of sampling, sampling distribution, standard error	Pages 179-205
11	8	<u>Estimation</u> Point and interval estimation, criteria of good estimator, large and small sample estimation for mean and the proportions. Determination of sample size.	Pages 208 -