SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

STATISTICS Course Title MTH 262-4 Code No.: BUSINESS (ACC, E.D.P., F.S.M.) Program: I11 Semester: JUNE, 1986 Date J. GLOWACKI Author

New:

Revision:

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APPROVED:

Chairperson

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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.

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.

| MTH | 262-4 |
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| TOPIC 1 | NO. PERIODS | TOPIC DESCRIPTION | REFEF | ENCES |
|---------|-------------|--|-------|---------|
| 1 | 1 | Introduction Definition, history and subdivisions of statistics | Pages | 1-5 |
| 2 | 3 | Frequency Tables and Graphs 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 | | Descriptive Measure Meaning of measures of central tendency, arithmetic mean, weighted mean, geometric mean, median mode | Pages | 58-90 |
| 4 | б | <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 variables Binomial distribution Poissson distribution Normal distribution | Pages | 200-245 |
| 7 | 5 | <u>Sampling</u> Purpose and definition, different types of sampling, sampling distribution, standard error | Pages | 269-302 |
| 8 | 8 | Estimation 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 |