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SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: **STATISTICS**

CODE NO.: MTH 276-4 **SEMESTER:** IV

PROGRAM: BUSINESS (ACCOUNTING)

(JkUTHOR: W.O. MAKI

DATE: JUNE 1991 **PREVIOUS OUTLINE DATED:** JULY 1989

APPROVED: DEAN/  BATE

STATISTICS — MTH 276-4

COURSE NAME — COURSE NUMBER

TOTAL CREDIT HOURS: 64

PREREQUISITE(S): MTH 262

I. PHILOSOPHY/GOALS:

The student will study confidence limits, hypothesis testing, Chi-square and analysis of variance and their applications to business, regression and correlation.

II. STUDENT PERFORMANCE OBJECTIVES:

The basic objectives are that the student develop an understanding of the methods studied, demonstrate a knowledge of the facts presented and show an ability to use these in the solution of problems. To accomplish these objectives, exercises are assigned. Test questions will be of near equal difficulty to questions assigned in the exercises. 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 below.

III. TOPICS TO COVERED:

1. Hypothesis Testing - 16 periods
2. Chi-square and Analysis of Variance - 16 periods
3. Regression and Correlation - 14 periods

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IV. LEARNING ACTIVITIES:	**REQUIRED RESOURCES:**	
1. HYPOTHESIS TESTING	Text: Ch. 8	
1.1 Basic concepts 1.2 Testing of means 1.3 Testing of proportions 1.4 Testing for differences between means and proportions	Questions: 13 - 25: 26 - 33 38 - 43 44 - 51 52 - 69:	 pp. 356 -- 357 pp. 361 -- 362 pp. 369 pp. 372 -- 373 pp. 391 -- 393
2.0 CHI-SQUARE AND ANALYSIS OF VARIANCE	Text: Ch. 9	
2.1 Chi-square test for independence 2.2 Chi-square test for goodness of fit 2.3 Analysis of variance 2.4 Inferences about population variance 2.5 Inferences about two population variances	Questions: 1 - 5 : 6 - 12: 14 - 24 26 - 38 39 - 47 48 - 54	 pp. 416 -- 417 pp. 428 -- 429 pp. 434 -- 435 pp. 447 -- 450 pp. 455 -- 456 pp. 460 -- 461
3.0 REGRESSION AND CORRELATION	Text: Ch. 10	
3.1 Estimation using regression line 3.2 Estimation using regression equation 3.3 Correlation analysis and standard error 3.4 Using regression and correlation	Questions: 1 -- 12 13 -- 24 25 -- 32 33 -- 40	 pp. 484 -- 485 pp. 502 -- 505 pp. 512 -- 513 pp. 517 -- 518

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V. EVALUATION METHODS: (INCLUDES ASSIGNMENTS, ATTENDANCE REQUIREMENTS ETC.)

4 TESTS:

- weighting may differ according to instructor
- A+, A, B, C and R grades used
- attendance and grading policy explained on handout

VI. **REQUIRED STUDENT RESOURCES:**

Statistics for Management - 5th ed.
Levin and Rubin
Prentice-Hall

VII. **SPECIAL NOTES:**

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.