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SAULT COLLEGE OF APPLIED ARTS X TECHNOLOGY

SAULT STEv MARIE? ONTARIO

COURSE OUTLINE

Course Title?	STATISTICS
Code No * ?	MTH 255-4
Prosram?	FORESTRY
Semester I	
Date?	JUNE? 1983
Author ?	J, MCGAULEY

New ? Revision?

APPROVED:

Chai rperson Date

FORESTRY

CALENDAR DESCBIEIIObJ

STATISTICS MTH 255-4

Course Name Course Number

EBILQSQEUIZGQ6LSJ

Statistical thinking and introduction? summarizing data and freauenca tables? mean? median? mode? standard deviation? probability and probabil functions? sampling concepts? estimation? regression and correlation.

bEiyOD QE ASSESSMENT. iGRAMNG MEIUODIJ

The students will be assessed by tests* These tests will include perioc tests based upon blocks of subject matter and may? at the instructor's c cretion include unannounced surprise tests on current work and/or a fin; test on the whole course. A letter grade will be based upon a student's weighted average of his test results. See also the mathematics depart- ment's annual publication "To the Mathematics Student" which is presents to the students early in each academic year.

IEXIBOQKiSi:

Statistics? A Fresh Approach
Saunders? Murph? Eng* (McGraw-Hill)

DBJECIiyESJ

The basic objective is for the student to develop an understanding of tl- 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 the *as*sign- ments• The level of competency demanded is the level reauired to obta ir overall passing average on the tests. The material to be covered is lis on the following page.

TOPIC	PERIODS	TOPIC DESCRIPTION	REFERENC
		Introduction	P * 6~6t>
		definition» development and scope of statistics uses and abuses of statistics	
		DescriEtiue Statistics	p. 7-50
		- Qu3ntativeandaua1itativedata - descrete and continuous vsrisbles - freauency tables* histograms? frequency polygon? cumulative freauency polygon	
		Measures of Location	
		- summation notations - means and weighted mean - median» mode	
		Measure of yarialion	
		- range* variance* mean deviation -• standard deviation* coefficient of variation from grouped and unSrouped data	
		Erahabiliiy	p. 91
		- meaning and types of probability - probability computations - binomial distribution - normaldistributi.on	
		Sau&liog Conceals	p. 113-
		importance of sampling sampling distribution of means central limit theorem	
		Estimating Means and EerceDtsaes	140-
		point 3nd interval estimation estimation of the population percentage determination of sample size	

FORESTRY - STATISTICS - FOR 255-4

Topic Description

Regression snd ConEelation

- scatter diagrams
- standard error of estimate

Iesiing HHEothesis

- hypothesis testing procedure
- null and alternative hypothesis
- one 3nd two tailed tests

ChirSQuare (Analysis iO&tioDali

- Chi-srauare distributions
- goodness of fit