

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: APPLIED STATISTICS

Code No.: PPE 345-4

Program: WATER RESOURCES

Semester: FALL

Date: SEPTEMBER, 1983

Author: S. C. VERMA

New:

Revision:

APPROVED:

Chairperson

Date

APPLIED STATISTICS

Course Name

PPE 345-4

Course Number

PHILOSOPHY/GOALS:

This course further develops student knowledge regarding the programming language and use of statistical package and library programs. Emphasis is placed on solving typical problems in the specialized area. The development of programs for solving typical problems in the resource area will be stressed.

METHOD OF ASSESSMENT (GRADING METHOD):

The final mark will be awarded which is higher of either:

- a) the final examination mark
- b) weighted mark calculated as follows:

Laboratory exercises	25%
Mid-term examination	25%
Final examination	50%

TEXTBOOK(S):

- Problem solving with computers by P. Colter  
McGraw-Hill Book Company
- Mini tab reference manual by Thomas Ryan and  
others, Duxbury Press, Boston

## APPLIED STATISTICS (PPE 345-4)

### OBJECTIVES:

1. To introduce advanced topics of the programming language done by the students in their first course on computer programming.
2. Application of knowledge of computer programming to various problems in the resources field.
3. Use of available programming packages in the statistics and resource field.
4. Development of programs for problems of interest.

### COURSE OUTLINE:

1. Revision of material discussed in first course
2. Types of sub-programs-statements, functions, sub-routine
3. Simulation and graphics
4. Advanced functions and statements
5. Data handling, interpolation
6. Statistical package (MINITAB)
7. Application to simple hydraulic problems
8. Analysis of chemical data
9. Curve fitting
10. Hydrologic modelling
11. Special programs