# SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

### COURSE OUTLINE

| Course Title: | PAPER TECHNOLOGY I                  |
|---------------|-------------------------------------|
| Code No.:     | PPE 240-3                           |
| Program:      | PULP & PAPER ENGINEERING TECHNOLOGY |
| Semester:     | 4                                   |
| Date:         | JANUARY 13, 1984                    |
| Author:       | ADAM SUGDEN                         |

New:

Revision:

APPROVED:

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### CALENDAR DESCRIPTION

## PAPER TECHNOLOGY I Course Name

<u>PPE 240-3</u> course Number

#### PHILOSOPHY/GOALS:

This is the first of two courses dealing with the technology of papermaking processes. The history of papermaking is briefly reviewed, highlighting technological developments that have led to today's processes. Modern processes for stock preparation, stock proportioning and paper colouring are studied. Wet-end technology including stock delivery and distribution headbox and slice design and operation are studied in detail. The operation of fourdriniers, twin-wire formers and cylinder machines is thoroughly investigated. Aspects of wet-end stock balances and stock testing are included. Press section operations including wet press performance will be previewed.

#### METHOD OF ASSESSMENT (GRADING METHOD):

The student's performance in the course will be assessed on the basis of three (3) tests and one problem set given at appropriate intervals during the semester. Each test will be worth 30% of the total mark. The problem set will be worth 10% of the final mark for the course.

Letter grades will be assigned based on the following performances:

A - 79+% B - 70 - 79% C - 60 - 69% R - -60%

Students having a final standing of 55-59% will be permitted to write a supplemental test covering the entire course material.

#### TEXBOOK(S):

The most appropriate textbook for the course (at the time of writing) is as follows:

MacDonald, R.G. & Franklin, J.N., eds., <u>Papermaking and Paperboard Making</u>, Vol III, 2nd Edition, Pulp and Paper Manufacture Series, McGraw-Hill, New York, 1970.