SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

# COURSE OUTLINE

**Course Title:** SURVEYS AND ASSESSMENTS

**Code No.:** FOR 353-4

**Program:** FOREST MANAGEMENT TECHNOLOGY

**Semester:** SIX

**Date:** SEPTEMBER 1989

**Author:** ERWIN GOERTZ

**New:** _____ **Revision:** X

**APPROVED:** _____ _____
**Chairperson** **Date** Aug 30/89

FOR 353-4
CALENDAR DESCRIPTION

| SURVEYS & ASSESSMENTS | FOR 353-4 |
|---|---|
| COURSE NAME | COURSE NUMBER |

**PHILOSOPHY/GOALS:**

Surveys and assessments play an integral role in monitoring the status of our forest resources as well as in evaluating the success of silvicultural projects. Technologists, in their dealings with intensive forest management practices will almost daily be planning or conducting surveys and/or assessments. The practical applications of each survey or assessment will be demonstrated.

**METHOD OF ASSESSMENT:**

Three tests will be given during the semester with each test comprising 25%. In addition, students will plan an aerial flight mission for one of the more common surveys. This student project will comprise 25% of the final grade. Students who, at the end of the semester, have an overall grade of less than 60% may, AT THE DISCRETION OF THE INSTRUCTOR, write a final test covering the entire course material.

| GRADES | | |
|---|---|---|
| | A+ | 90-100% |
| | A | 80-89% |
| | B | 70-79% |
| | C | 60-69% |

**TEXTBOOK:**

There is no formal textbook for this course, however, the following OMNR publications will be used as a reference.

1. Ontario Ministry of Natural Resources, 1981. Regeneration Survey Manual for Ontario. 76 pages.
2. Ontario Ministry of Natural Resources, 1984. Manual of Instructions for Completing Silvicultural Records. 212 pages.

| TOPIC NO. | PERIODS | TOPIC DESCRIPTION |
|---|---|---|
| 1 | 3 | SUPPLEMENTARY AERIAL PHOTOGRAPHY<br>- acquisition and flight planning for aerial photo missions with emphasis on forest management applied surveys |
| 2 | 3 | PLANTING QUALITY ASSESSMENT<br>- sampling procedure for evaluating planter performance<br>- assessment plot attributes<br>- planting quality summary<br>- MNR and industry tally sheets |
| 3 | 2 | SEEDLING SURVIVAL<br>- sampling design and number of plots<br>- assessment procedure<br>**TEST #1** |
| 4 | 2 | STOCKING ASSESSMENT<br>- free-to-grow surveys in conifer stands artificially regenerated |
| 5 | 4 | FOREST INVENTORY<br>- goals of the inventory, methodology, tally sheet preparation and report summarization<br>- assessment of Ontario's forest resources inventory system |
| 6 | 4 | NOT SATISFACTORILY REGENERATED (NSR) SURVEY<br>- evaluating Barren & Scattered (B-S) areas for their possible inclusion into the forest base<br>- sequential sampling tally sheet<br>**TEST #2** |
| 7 | 2 | CUT INSPECTION (RESIDUE SURVEY)<br>- methodology and survey types will be discussed<br>- line transect tally |
| 8 | 3 | PLUS TREE SURVEY AND TREE SEED CROP FORECASTING<br>**TEST #3** |