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SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: SURVEYING AND MAPPING

Code No.: SUR 236

Program: FORESTRY TECHNICIAN

Semester: FOUR

Date: January 1986

Author: 6. M. CAMERON

> New: Revision:

APPROVED:

SURVEYING AND MAPPING Course Name

SUR 236 Course Number

PHILOSOPHY/GOALS:

See preamble: Attached Course Outline

METHOD OF ASSESSMENT (GRADING METHOD):

See Attached

TEXTBOOK(S):

SURVEYING NOTES' SAULT COLLEGE

CRITERIA EMPLOYED FOR ASSESSMENT PURPOSES

1. TOTAL ASSIGNMENT, PROJECT AND TEST ASSESSMENT ENTIRE SEMESTER
Late submissions will not be accepted unless prior consultation with intructor discloses unusual difficulty

2. ATTENDANCE

- -Attendance will be recorded at the beginning of each class
- -Late arrivals will be marked absent
- -Chronic late arrivals will be refused admittance.

A poor attendance record will work to the detriment of the student where a border line situation is encountered

ASSIGNMENT, PROJECT, AND TEST ASSESSMENT

Individual assignments, projects and tests will be assessed on a basis of 100 marks.

-minimum acceptable grade = 60

BREAKDOWN

TOTAL SEMESTER = 100 marks

Assignments = 25 marks
Mid-semester Tests = 35 marks
Final Semester Tests = 40 marks

EXAMPLE

8 Assignments at 100 marks each
= 800 possible marks

- 600 Possible marks

Assume 640 marks attained

Therefore $640 \times 25 = 20$

Mid-Semester test
Assume a grade of 74 marks attained
Therefore $74 \times 35 = 26$

Final Semester test
Assume a grade of 82 attained
Therefore _82 x 40 = 33
100

Therefore 20+26+33 79 or a grade of B

MARKING SYSTEM (con't)

INCOMPLETE GRADES

- 1. Repeat assignments or tests to carry a maximum possible grade of 60.
- 2. Mid-semester test may be repeated only once. Final semester test rewrites will be scheduled only during the prescribed make up period. Failure to attain a satisfactory grade therein will require repeating the course. Satisfactory completion. Semester 3. will be a prerequisite for entry, semester 4.

SEMESTER 4

Similar to the above in all respects, excepting as follows

Total Semester 4 100 marks

Assignments - 25 marks
Mapping Projects - 25 marks
Final Semester Test - 50 Marks

SAULT COLLEGE OF APPLIED ARTS. AND TECHNOLOGY

SAULT STE. MARIE

FORESTRY TECHNICIAN

COURSE OF STUDY OUTLINE SURVEYING AND MAPPING

The Surveying and Mapping course is designed to familiarize the student with basic surveying principles and to provide field practice in the use of surveying and the application of surveying methods. Emphasis is placed on surveying and mapping problems uniquely inherent to Forestry.

TIME

Semester 3 - SUR 230-3

3 Hours lecture (theory) and laboratory per week

Semester 4 - SUR 236-3

3 Hours lecture (theory) and laboratory per week

TEXT

Sault College - SURVEYING NOTES

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE.NARIE

FORESTRY TECHNICIAN SEMESTER 4

COURSE OF STUDY OUTLINE - SURVEYING AND MAPPING SUR 236-3

TOPIC NO. NO. of HOURS

TOPIC INFORMATION

LINEAR MEASUREMENT

Terms and definitions, units of linear measurement, conversions, methods of measuring distance, steel tapes, taping notes, errors and mistakes in taping establishing a pacing standard.

THE ENGINEER'S TRANSIT

Basic principles, types of transits and their general application, use of transits handling and set-up, the transit vernier sources of error, field exercise.

TRAVERSING

Types of traverse, angular closures, methods of traversing, stationing, mistakes and errors in traversing and their elimination.

15 TOPOGRAPHIC MAPPING

Freehand lettering, plotting traverse data with protractor and sclae, plotting coordinates for horizontal control, plotting irregular boundaries, plotting topographic detail, mapping from field notes.

STADIA SURVEYING

Definitions, theory of stadia, the application and limitations of stadia surveying, notekeeping, reduction of stadia field notes, field procedure, plotting stadia topography.

FIELD EXERCISES

Transit and tape traverse survey, stadia survey.

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SURVEYING

BIBLOGRAPHY - REFERENCE TEXT

- 1. Philip Kissam <u>SURVEYING PRACTICE</u> third edition <u>McGraw-hill Book Company</u>
- 2. Philip Kissam SURVEYING INSTRUMENTS AND METHODS McGraw-Hill Book Company
- 3. Philip Kissam SURVEYING FOR CIVIL ENGINEERING McGraw-Hill Book Company
- 4. Parker and Mc Guire SIMPLIFIED SITE ENGINEERING John Wiley and Sons.
- 5. Davis and Foote SURVEYING . THEORY AND PRACTICE McGraw-Hill Book Company
- 6. Breed and Hosmer ELEMENTARY SURVEYING
 John Wiley and Sons
- 7. Rubey, Lommell and Todd <u>ENGINEERING SURVEYS</u>
 The MacMillan Company
- 8. Moffitt and Bouchard SURVEYING SIXTH EDITION
 In text Educational Publishers
- 10. McCormac <u>SURVEYING</u>
 Prentice Hall Inc.
- 11. Ives HIGHWAY CURVES

 John Wiley and Sons
- 12. HICKerson ROUTE SURVEYS AND DESIGN
 McGRaw-Hill Book Company
- 13. Meyer ROUTE SURVEYING

 In text Educational Publishers
- 14. Herubin PRINCIPLES OF SURVEYING Second Edition Reston Publishin Company, Inc
- 15. Nassau PRACTICAL ASTRONOMY

 McGraw-Hill Book Company
- 16. Allen SIX PLACE TABLES

 McGraw-Hill Book Company
- 17. Brunns A NEW MANUAL OF LOGARITHMS
- IB. Ives fl6gbRfII?S^l6aa086RgISoFUNCTIONS