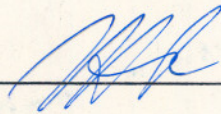


CAMBRIAN COLLEGE
of Applied Arts and Technology
Sault Ste. Marie

COURSE OUTLINE

FOREST PROTECTION

FOR 213 - 4



FOREST PROTECTION

FOR 213 - 4

TEXT: Principles of Forest Fire Management by Clar and
Chatten
- California State Board of Forestry
Office of Procurement
P. O. Box 1612
Sacramento, California 95807

REFERENCE TEXTS:

Forest Fire Control and Use - K. P. Davies
- McGraw-Hill

Forest Fire Prevention Act - 1969 edition, Queen's Printer, Toronto

Renewing Nature's Wealth - R. S. Lambert - Hunter Rose Co., Toronto

Fire Control Plan for Sault Ste. Marie Chief Ranger Division

FOREST PROTECTION

FOR 213 - 4

TOPIC NO.	PERIODS	TOPIC INFORMATION
1	1	<u>General</u> ✓ Introduction ✓ Definition of forest protection ✓ Purpose, scope and aims of the course
2	7 4	<u>History of Forest Protection in Ontario</u> ✓ Early forest fire catastrophies ✓ Forest Fires Prevention Act of 1917 and 1969 ✓ Development of the control organizations for forest fire, insects and disease ✓ Technical developments include the role of aircraft Fire Prevention and prescribed burnings ✓
3	2 2	<u>Forest Fire Statistics</u> Value of keeping statistics Classification of forest fires Forest fire report forms ✓
4	2 2	<u>Forest Fire Detection</u> Early detection systems ✓ Modern detection systems ✓
5	8 ✓	<u>Principles of Combustion</u> Three phases of Combustion ✓ Equation for complete combustion ✓ Factors affecting the rate of energy release ✓ The fire triangle ✓
6	8 4	<u>Weather and Forest Protection</u> Definition of weather ✓ Regional weather variation ✓ Hazard index and burning index ✓ Rating burning conditions ✓ Lightning behaviour and fire ✓

Labs.
3 wks. Sept.

Labs.
2 wks.
Oct.

FOREST PROTECTION

TOPIC NO.

PERIODS

TOPIC INFORMATION

7	8 4	<p><u>Fire Weather Stations</u></p> <p>Elements of weather - temperature, rel. humidity, wind, air pressure ✓ Location and layout of stations ✓ Standard weather instruments Beaufort scale of wind velocity</p>
8	12 7	<p><u>Introduction to Forest Fire Control</u></p> <p>Fire behaviour and kinds of forest fires Fighting fire with hand tools Fighting fire with mechanized equipment The role of aircraft in fire control Pre-suppression - fire control plans</p>
9	8 4	<p><u>Introduction to Forest Entomology and Forest Pathology</u></p> <p>Insect and disease effects on forests Identification and classification of forest pests Role of aircraft in forest pest control</p>
10	4 3	<p><u>Review</u></p>

4 labs.
Nov.