

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: FOREST PROTECTION

Code No.: FOR 103-4

Program: FORESTRY


Semester: ONE

Date: AUGUST 1988

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New: \_\_\_\_\_ Revision: X

APPROVED:

  
Chairperson

Aug 29/88  
Date



CALENDAR DESCRIPTION

FOREST PROTECTION

FOR 103-4

Course Name

Course Number

PHILOSOPHY/GOALS:

Successful completion of this course will certify a student as being qualified to function as a crew member of Ontario Ministry of Natural Resources forest fire fighting crews.

Topics include: Communications, Fire Behaviour, Use and Maintenance of Equipment, Fire Suppression Skills, Aerial Operations, Camp Operations, and Safety.

METHOD OF ASSESSMENT (GRADING METHOD):

Quiz #1 before to Fire Camp	5
Fire Camp (Oct 15-30)	20
Test #1 (week Oct 31-Nov 4)-lecture	25
Quiz #2 (after fire camp including FWI and Fire Behaviour)	10
Self Study Workbook "Fire Behaviour" (Due week of Oct 31- Nov 4) Labs	P or I
Test #2 all course material week of Dec 5-9 Labs	40
Participation Bonus	10

110

- A 85
- B 75
- C 65

Quiz 1 - must pass to attend fire camp

Fire Camp	Attempt	A	B	C
Demo	1	5	4	3
Pump	3	5	4	3
Coupling	3	3	2	1
Melon	1	3	2	1
Chainsaw	1	4	3	2

must total 10 or "Fast R"

- Test 1 - all material up to test date
- Test 2 - total course material

Participation Bonus	Start with	10
	miss lab	-1
	late lab	-1
	late lecture	-2
	participation, up to	+3

TEXTBOOK(S):

1. Forest Fire Suppression
2. Canadian Forest Fire Weather Index
3. Analysis of Fire Behaviour
4. Forest Fire Control Terminology
5. The Forest Fire Prevention Act

LEARNING OBJECTIVES	CONDITION	ACCURACY
(ACCORDING TO UNIT CREW TRAINING STANDARDS - MINISTRY OF NATURAL RESOURCES)		
Define fire-related terms	(1.01)	80% accuracy
Demonstrate technique for operating a two-way radio according to DOC	(1.05)	Field
Troubleshoot and correct problems	(1.05)	Lab
Allocate resources on a Step 1 fire	(2.01)	Lab Problem
Match personnel, equipment and materials given a specific set of field conditions	(2.01)	Lab Problem Field Exercise
Demonstrate safe use of fire tools and equipment (chainsaw, axe, shovel, etc.) (with adequate job experience)	(2.02)	Field
Identify work hazards & describe corrective action	(2.02)	Lab/Field
Keep records for fire pumps & chainsaw (machine log) time sheets	(3.02)	Field
Select a site on a map, draw a camp plan, erect camp...activate daily roster	(3.02)	Lab/Field
Sharpen axes, chainsaws, shovels, pulaski	(3.03)	Lab/Field
Repair tents and fire hoses (emergency)	(3.03)	Lab/Field
Maintain chainsaw & fire pump	(3.03)	Field
Measure air temperature, R.H. wind velocity and direction	(3.04)	Field



LEARNING OBJECTIVES		CONDITION	ACCURACY
Describe machine-site compatibility bulldozer and fire plan	(4.02)	Lab	
Describe initial access route to a fire given forest types and topography	(5.02)	Lab Problem	Acceptable
Select appropriate tools - chainsaw, axe, bowsaw	(6.03)	Lab Problem	Acceptable
Select appropriate tools, describe and demonstrate use, maintain, retrieve - hose - shovel - back-pack pumps - pulaski, etc.	(6.03)	Given Set of Lab/Field	60% Acceptable
List factors that lead to selection of specific fire control equipment	(6.03)		60%
Identify and describe situations: boarding, loading, docking, signalling aircraft; flammable fuels; lifting heavy objects; cargo dropping; volatile liquids; water craft	(6.03)	Lab/Field (Checklist)	60% Acceptable
Describe procedures for deployment of men & equipment	(6.03)	Lab	60%
Describe factors which affect fire behaviour individually and in combination - slope, weather, wind, topography, fuel, fire type, etc.	(6.03)	Lab	60%
Record FWI and computing. Explain relationship to fire behaviour	(6.03)	Lab	60%

LEARNING OBJECTIVES		CONDITION	ACCURACY
Select a base campsite on a map	(6.03)	Given set of conditions	Acceptable
Describe organization of base camp, e.g., location of helipad, radio antennae, dock	(6.03)	Given Campsite	Acceptable
Describe construction and installation of antennae	(6.03)		
Construct a dock suitable for boat or aircraft	(6.03)		