SAULT COLLEGE OF APPLIED ARTS / TECHNOLOGY

SAULT STE. MARIEf ONTARIO

COURSE OUTLINE

Course Title! WOOD HANDLING S PREPARATION

Code- No • J PPE 100-2

Program: PULP % PAPER TECHNOLOGY

Semester: I

Date : AUGUST, 1983

Author J E»A*N. SUGDEN

Newt Revision? X

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ChairaejcsoD Date

WOOD HANDLING 8 PREPARATION
PPE 100-2

Wood Handling % Preparation — PPE 100-2

Course Name — Course Number

EHILQSQEHXZGOALS:

Wood Handling % Preparation is the first pulp and paper course tak by students entering the Pulp % Paper Technology Program• The course is designed to provide the student with a theoretical background of the flo; and process steps of woody raw materials leaving the forest or sawmill ai| entering the pulping process.

The course explores f orest harvesting » log and chiP transPort ? economics of transportation», wood yard measurements*r pulp wood identification and the effects of wood defects on wood yard procedures arl pulping processes. The course topics will provide background material fJ specialized Pu1P and Paper courses in subseauent semesters.

METHOD QE ASSESSMENT 1GRADING MEIHQDlt

Student will be graded on the basis of their performance on four (^ tests to be held at appropriate intervals during the semester. Each te will be worth 25% of the final mark on the course. The test on PUIP WOOL identification will rectuire 75% as a passing mark* Grades will be assist as follows!

A -• 80 + %
B – 70-79%
c -• 55-69%
n •- 55%

Students with an R grade and who have at least an average of i0% will be permitted to write a supplemental test.

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There is no sui.table textbook for the course A short lis t o 1 reading references will be provided.

WOOD HANDLING & PREPARATION
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QBJECIiyES

Upon completion of the course the student will*

1, Be able to trace the flow of woody raw materials (loasi chips and ho fuel) from the forest to the beginning of the pulping process.

2. Obtain an understanding of the importance of transportation networks methods and their costs to the economics of the pu1Ping Process.

3* Be familiar with wood handling and preparation eouipment and process used in the North American PUIP industry*

4. Will know the theory of volumetric and weight scaling of woody raw materials*

5* Be able to identify selected Ontario pulpwood species on the basis a- gross wood and bark features*

NATURE 0E EBESENIAIION

Each meeting is designed to last 2 hours. In most cases this time w. spent as 3 lecture or demonstration using visual aids. Some field trir appropriate locations will be held to allow students to observe wood han. and preparation eauipment in use. Brief reports on the field trips will reauired.

COURSE I0EICS

Ueek	logics. Cowered
1	INTRODUCTION TO WOOD HANDLING AND PREPARATION
	- Courseou11ine - 6radingandeva1uation - Field trips - Historical background
& 3	FOREST HARVESTING
	- Manual methods • - Mechanical methods ▪ Limitations - Forest process!ng

WOOD HANDLING 8 PREPARATION
PRE 100-2

COURSE IOEICS iCoDlidl

Week	IDEICS Cowered
4 S 5	LOG TRANSPORTATION
	- Ro3d transport - Rsi1 tr3nSPOTt - WatertransPort
	WOOD RESIDUE TRANSPORT
	- Chips - Hosi fuel
	ECONOMICS OF TRANSPORT
	- Effect of distance - Effect of topography - Effect of transport mode
8 X 9	WOOD YARD MEASUREMENT
	•- Quantity of wood - Volume and weight scaling
10	WOOD IDENTIFICATION
	- Selected Ontario pulpwoods - Gross wood features - Gross bark features
11	DEFECTS AND THEIR EFFECT ON PROCESSES
	- Decay - Crook and sweep - Dirt
12-16	WOOD YARD PROCEDURES
	- S3wing to bolts - Debarking - ChippinSi - Screening - Hog fue1 - Storaseandrec1amation - Transport in the mill yard

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Reference 1 • B r i 11 ? K * W. e d. ? Handbook of P. u 1 E & E a E e i ^ I e e h n o 1 o g a ? 2nd Edition? Van Nostrand? New York? 1970.

Reference 2. Macdonald? R.6. % Franklin? J.N* eds. » Ibe Euleing Q£ Wood Pulp % Paper Manufacture series? Vol. 1? McGraw-Hill? New York? 1969.

SEECIEIC IQE'ICS AS INDICATED*

NOTEt This is not an exhaustive list of reference reading 01her inster may be assigned or made available es appropriate.