

COURSE PREFIX:	FPT 220
COURSE TITLE:	Paper Machine Dry End
LEC HRS/ WEEK:	2.0
LAB HRS/WEEK:	3.0
CREDIT HRS/SEMESTER:	3.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

Course Description:

This course is the study of the dry end of the pulp/paper machines including dryers, calenders, coaters, reels, and winders. Students will learn how to describe the dry end process and equipment, safety, environmental concerns, and fundamentals of drying, calendering, & winding

Course Competencies:

Upon successful completion of this course, the student should be able to:

Module 1: Dry-end equipment operation

- Describe the overall drying process and equipment.
- Describe the internal operations inside the dryer shell and the phases on each individual dryer.
- Describe the three phases of drying for the entire process.
- Describe effects of drying on sheet structure, bonding, and shrinkage and how dryer and calendering operations affect paper properties.

Module 2: Other dry-end topics

- Describe the auxiliary systems, including speed and draw control, steam and condensate handling, air and pocket ventilation systems, sheet threading, etc.
- Describe the control room, diagnostic, and maintenance operations.
- Describe calendering operation, variables, and control.
- Describe reel and winding operations, and control.

Minimum Standards

To successfully complete this course, the student must meet course competencies with an average accuracy of 70%. The student must meet this standard in order for the course to serve as a prerequisite and/or for the course to apply towards a certificate.

Course Requirements

Students are responsible for attaining competencies through completion of the following course requirements:

Attendance Policy

Students will be bound by the policies stated in the York Technical College Student Handbook. Students must attend 80% of the hours assigned the class for a semester to receive credit for the course. In case a student does miss a class, the student is responsible for obtaining the material that was covered during the absence. If a student is aware that a class will be missed, then the student should notify the instructor at the earliest possible date. Students with unexcused absences during tests will be allowed to make up tests at the discretion of the instructor. The student has the burden to be sure that some arrangement has been made with the instructor for taking a make-up test.

Academic Honesty

York Technical College adheres to the South Carolina Tech Student code, approved by the State Board for Technical and Comprehensive Education on March 13, 1974 (last revised April 25, 1984). Copies of this code are available in the Library and from Student Services. Any student involved in cheating or any other academic dishonesty will be given a grade of zero and will be subject to further disciplinary action. See the student handbook section "Student Life" subheading "Student Conduct" for further details.

Class Participation

Students will be expected to participate in class discussions, to demonstrate problem-solving techniques, to complete tests, homework, lab experiments, lab reports and other assigned work.

Evaluation Strategies/Grading

The grading scale will be as follows:

Grade Points

A	90-100
B	80-89
C	70-79
D	60-69
F	00-59

Evaluation Method

Tests may be written or oral and may contain questions that are true or false, short answer, multiple choice, fill in the blank and/or problems. Students should refer to the instructor for the number of tests to be given and the material to be covered on each test. Each test will be of equal weight unless otherwise indicated by the instructor. Lab grades

will be based on the completion of the Course Competencies, team work, safety, class participation, and housekeeping.

Final grades will be determined as follows:

Module 1	Tests	30%
	Lab	10%
Module 2	Tests	30%
	Lab	10%
Module 3	Tests	10%
	Lab	10%
Total Grade		100%

Entry-Level Skills

Students should demonstrate hand-eye coordination, manual dexterity, and be able to work in an industrial environment.

Prerequisites

FPT 101

Co-Requisites

None