

Be May

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

CURRENT TOPICS IN PULP AND PAPER

PPE 364-2

PULP AND PAPER ENGINEERING TECHNOLOGY

6

NOVEMBER 15, 1984

ADAM SUGDEN

New: X

Revision:

%

CALENDAR DESCRIPTION

Current Topics in Pulp & Paper

PPE 364-2

Course Name

Course Number

PHILOSOPHY/GOALS:

This is a seminar course given by the students together with guest speakers to add depth and breadth to the students' studies. Students will prepare and present seminars on topics of special interest, with particular emphasis being given to those subject areas not covered elsewhere in the program.

METHOD OF ASSESSMENT (GRADING METHOD):

The student's performance in this course will be assessed on the basis of his or her performance in preparing and presenting two seminars. The topics for each seminar will be selected in collaboration with Faculty. The value of each seminar will be equal and there will be a portion of the final grade that is based on attendance and participation. Letter grades will be assigned as follows:

%

A = 79+% B = 70-79% C = 59-69% R = -59%

Students having a final standing of "R" will be required to repeat the course in order to obtain credit. There are no supplemental tests given.

TEXTBOOK(S):

Since this is a seminar course, there is no textbook assigned. However, the student should consult the Reference List in order to obtain information on potential sources of guidance for the preparation and presenting of seminars.

%

%

CURRENT TOPICS IN PULP AND PAPER

OBJECTIVES;

The primary objective of this course is to give students practical experience in researching, preparing and presenting seminars on a chosen subject of current interest to the pulp and paper industry. Since, upon graduation, the student will, at some time, be required to present similar seminars to their colleagues, peers or the public, the experience gained from this course will prove useful.

A secondary objective of the course is to provide all students with current information on topics that are of immediate interest and concern to the pulp and paper industry. Therefore, the material presented must be based on current reading from technical journals, books and other publications.

NATURE OF PRESENTATION:

This course will be based on two 1-hour periods each week. Each period will be used for the presentation of seminars, either by students or by invited speakers. For one of the two seminars each student will present, it will be necessary for a written report to be prepared.

Each student will prepare a brief written summary of each seminar presentation. These summaries must be available to all participants in the course before the seminar is given. In this way, all students will have access to the basic information to be presented and as such will be prepared to participate more fully in the seminar discussion.

The required format for each seminar will be handed out at the beginning of Semester 6. Students should be aware of the requirement to follow this format in all cases.

%

SUGGESTED TOPIC AREAS

While it is not the intent of this outline to limit the nature of topics to be covered in this course, the following list presents a number of topics that are considered to be valid areas from which to draw seminars.

THE INDUSTRY TODAY

- Technological changes in the pulp and paper industry
- Economic trends in the industry
- Social changes in the industry

RAW MATERIAL CHANGES

- Increasing use of hardwoods
- Use of non-wood fibres
- Use of high-yield pulps in papermaking
- Increasing use of secondary fibre

CHEMICALS

- Additives to improve pulping properties
- Additives to improve paper properties

NON-TRADITIONAL PULPING PROCESS

- Organosolv process
- OPCO process
- Future pulping processes

MACHINE CLOTHING

- New products, materials, designs, performance
- Alternative systems

DRY FORMING OF PAPER

- Development, scope, properties
- Implications for the paper industry

PROCESS AUTOMATION

- Current and future trends
- Capabilities of systems
- Equipment and costs
- Effects on and returns to the industry

WATER USE AND POLLUTION CONTROL

- Purification needed,
- Reuse in "closed" mills, problems, advantages
- Treatment and monitoring

THE FUTURE OF PAPER

- Impact of electronic media
- Costs
- Alternate products, e.g., plastics
- New products requiring paper