

Department of Paper and Bioprocess Engineering

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PSE 300:	Introduction to Papermaking Fall 201	
Lecture:	T/TH 11:00 A.M. – 12:20PM, 211 Walters Hall	
Instructor:	Dr. Klaus Dölle	
Room:	421 Walters Hall	
Phone:	x6531	
E-mail:	kdoelle@esf.edu	
Office Hrs:	open door policy and by appointment	

Informal professor/student meetings are intended to help students, so use this time to ask questions or discuss problems we don't have time for in class.

Objectives:

After completing this course the student should be able to:

- 1. Have a basic knowledge and understanding of the paper industry, papermaking processes and paper grades.
- 2. Understand elementary paper technology and know sources of information in this area.

Catalog Description:

Historical and commercial consideration of the paper industry. Technology of papermaking with emphasis on stock furnish, stock preparation and paper machine operation. Introductory discussions of papermaking materials, formation, and reactions of a fibrous web.

Course Topics:

This course covers the papermaking process from tree harvesting to commercial end products. It focuses on the differences in pulp preparation and papermaking and relates to industrial processes, technologies and products for the production of various paper material with a emphasis on renewability, recyclability and sustainability.

Textbook:

Smook, G.A., "Handbook for Pulp & Paper Technologists", Angus Wilde Publications, 2002 or newer version. The text is available from national TAPPI, Syracuse University Bookstore or other sources and should be ordered individually or through the Papyrus Club well before the beginning of the semester. You will be responsible for all the material in chapters 1-27, although not all of this material will be covered in the class lectures. Although specific reading assignments may not be given, you should be reading the appropriate chapters as the semester proceeds.



Department of Paper and Bioprocess Engineering

Course Structure:

The course will consist of lectures, discussions, student oral presentations, professional data collection and visualization and homework. I reserve the right to give unannounced quizzes if the situation warrants.

COURSE REQUIREMENTS

Mid Term Exam:

The mid term exam will account for 20% of your final grade and will cover all reading materials and class lectures from the beginning of the semester up to the midterm date. The exam will consist of multiple choice, true/false, and short essay questions.

Final Exam:

The final exam will account for 30% of your final grade and will cover all reading materials and class lectures from the beginning of the semester up to the end of semester. The exam will consist of multiple choice, true/false, and short essay questions.

Quizzes:

Announced and unannounced quizzes account for 15% of your final grade and will cover reading assignments and the week's material due for the assigned class.

Homework:

Homework will cover the course lecture and or will be assigned to a special lecture topic and will account for 15% of your final grade. Homework assignments are to be handed in at the beginning of the following lecture. Late homework will be not accepted.

Article Review:

You are responsible for an Article Review, which will account for 10% of your final grade. Your review paper may not exceed 4 pages, with a minimum text font Arial size of 12 point and margins of one inch on all sides.

You will receive a separate handout with specific instructions for that assignment. Late papers will be not accepted.

Attendance:

Attendance is expected at all lectures and will account for 5% of your final grade. Please be aware that absences are not divided into excused and unexcused. Regardless of the reason, an absence from class is counted as an absence. Therefore, please be on time! **No** make-up exams or quizzes will be given unless you have an acceptable reason (family emergency, illness, etc). If an emergency should arise, you must notify me prior to the exam and **not** after. Students missing a lecture are



Department of Paper and Bioprocess Engineering

expected to get the missed material and notes from their classmates. Individual makeup lectures will not be given and lecture notes are not available from the instructor. Reading assignments and homework assignment due dates are given on a separate handout, sent per e-mail or announced during class. Lectures begin at 11:00 unless otherwise announced.

Absence		Late arrival or early departure	
Number	Attendance Grade	Number	Points deducted from attendance grade
0	100	0	0
1	90	1	5
2	80	2	10
3	70	3	15
4	60	4	20
5	50	5	25
6 or more	An additional -20 points per absence	6 or more	An additional -10 points per incident

Participation:

Participation is expected at all lectures and will account for 5% of your final grade. The participation grade will be based on reading assignment questions, presentations, and involvement in class discussions. 10 Participation points will be deducted for opened laptops (except to take notes), cell phone use and text messaging during class per incident.

GRADING CRITERIA AND WEIGHTS

Grading System:

The tentative grading system of this course is based on a 100 point scale, **not a curve**, and will include and will include a midterm exam, final exam, quizzes, homework assignments, article reviews, attendance and class participation. The final letter grade will be based on a curve, but generally 65% is required for a D, 75% for a C 85% for a B and 95% for an A.

The final letter grade will be based on the following table:



Department of Paper and Bioprocess Engineering

Tentative 100 point grading scale:

Percent/Points	Undergraduate	Graduate
94-100	A (Excellent)	A (Excellent)
90-93	A-	A-
87-89	B+	B+
83-86	B (Good)	B (Satisfactory)
80-82	В-	В-
77-79	C+	C+
73-76	C (Passing)	С
70-72	C-	C- (Minimum Passing)
65-69	D (Minimum Passing)	F (Failure)
0-64	F (Failure)	

All material for grading submitted to the instructor will be not returned to the student. The student will receive a note with the grade achieved for each assignment, quiz and exam. However the student is welcome to discuss the assignment with the instructor.

Your final class grade will be calculated based on the following:

Requirement	PSE300
Midterm exam	20%
Final exam	30%
Quizzes	15%
Homework	15%
Article review	10%
Attendance	5%
Participation	5%
Total	=100%



Department of Paper and Bioprocess Engineering

CLASS POLICIES

Exams or Quizzes:

No make-up exams or quizzes will be given unless you have an acceptable reason (family emergency, illness, etc). If an emergency should arise, you must notify me prior to the exam and **not** after. Students missing a lecture are expected to get the missed material and notes from their classmates. Individual makeup lectures will not be given and lecture notes are not available from the instructor. Reading assignments and homework assignment due dates are given on a separate handout, sent per e-mail or announced during class. Lectures begin at 11:00 unless otherwise announced. Students are expected to arrive to class on time.

Computers, Disks, and Viruses:

Computer and disk failures are a fact of life in the computer world. You should make multiple copies of all your work so that if there is a failure, your work is not lost. The failure of a disk, a computer, or other storage media is not an acceptable excuse for late or missing assignments or late take-home exams.

Computer viruses are also a fact of life in the computer world. It is the students' responsibility to keep their assignments and diskettes virus-free. You should regularly scan your diskettes (and your computer if you own one) with up-to-date virus software. All college computers have virus software installed. Assignments handed in or brought in for consultation on infected diskettes or other media will be given a score of 0 for that assignment. Students submitting infected diskettes multiple times will have their course grade reduce by one full grade per incident.

Cell phones:

The use of cell phones is not allowed during lectures and other class activities. Cell phones must be turned off or left at home so as not to disturb the other students in the class. The consequences of using a cell phone or a cell phone ringing during class can include one or both of the following:

- The owner of the cell phone will be immediately asked to leave the classroom and may not return during that class period.
- The entire class will be given a quiz.

Quizzes:

The instructor reserves the right to give both announced and unannounced quizzes, if necessary to encourage preparation for class. There will be *no* makeup quizzes.

Help on Assignments:

The instructor is very willing to help with the various assignments in the class. However, students must demonstrate that they have made a good-faith effort at solving the problem before consulting with the instructor. When asking questions, be prepared to demonstrate the efforts that you have made in solving the problem and be prepared to



Department of Paper and Bioprocess Engineering

discuss your plan of attack. Statements such as: "I don't understand the problem, please show me how to do it" will probably not be answered. You will be asked about what you do understand about the problem. Questions should be brought to the instructor well before the due date. The instructor is not obligated to make extensive homework consulting time available the day before the due date.

Collaboration:

You are encouraged to discuss the homework assignments amongst your classmates. However, each student is expected to hand in their own work. Students handing in substantially similar assignments will have the single grade divided among the students. For computer solutions, simply changing the variable names, prompt strings, and comments does not make programs substantially different.

Email Accounts:

If you do not regularly use your student email account, you should check it regularly or have the email from that account forwarded to an account that you do use. Most webbased email services can POP the SU mail server. If you have trouble accessing your account or have difficulty with using the email system, help is available in 116 Hinds Hall on the SU campus. SU's Computing and Media Services produces a packet of handouts for using their Unix system, including the mail system.

Academic Expectations:

Students are expected to conduct themselves in a professional manner at all times. This expectation extends to all course related activities including the use of email. Email communications should also be written in a professional manner. Misuse of email and the course could result in your access to these services being curtailed.