FW3098 - Wood Processing

Syllabus (sample from previous year)

School of Forest Resources and Environmental Science Michigan Technological University

Instructor: Peter Laks
Office: Room 120
Phone: (906) 487-2364
Cell: (906)369-2364
email: plaks@mtu.edu

Mill Tour Dates: Monday, August 24 - Friday, August 28 (sample from previous year)

Course Summary:

During the mill tour part of the class we will visit 13 forest products manufacturing plant sites during the week prior to the start of the Fall Semester. These cover a broad range of materials and products produced by the forest products industry. In the seminar section of the course, we will talk about the tour and general concepts in manufacturing wood based products, then you will submit a written report and present a seminar on two of the mills that we visited on the tour. Mill assignments are given later in this syllabus.

Grading:

Written Report: 40%
Seminar 40
Class Participation: 10
“Thank You” Letter: 10

Report: Due dates for report:

Outline – September 4
Abstract – September 11
Rough Draft – September 18
Final Version – October 2

All these items are due at 1:00 pm on those dates. I will get your corrected rough drafts back to you ASAP after September 18. You can continue to resubmit rough drafts for correction and comments up until the due date for the final version. This gives you an opportunity to keep fine-tuning your paper for the highest grade.
Your report will concentrate on two mills and the products they produce. The mill assignments are given below. I expect you to use other information sources (other than your observations at the mill and company literature) to write your report. You should become an expert on the mills and the products they produce. Make sure you take especially good notes when we visit your mill and ask for any literature they may have. Also, note the names of our tour guide(s) and get the correct mailing address for your thank-you letter. It is also a very good idea to develop an understanding of your mills and their products before the Tour. The easy way to do this is look at their website. This way you will have a better idea of the right questions to ask when we visit. Some plants allow images to be taken, some don’t. It depends on the plant and particular tour guide. Bring a camera if you have one. You will find pictures to be invaluable for your presentation.

At a minimum, your report should include:

1. Industry background
   - what is the industry context for the mills?
2. What raw materials does the mill use to make the final product(s)?
3. Detailed description of the mill processes
   - how the mill operates, steps in the manufacturing process
   - wood species being used
   - how wood is procured
4. What products are produced? What are typical applications?
5. How are secondary products (e.g. sawdust) utilized or disposed of?
6. Who owns the mill? Is it part of a larger company?

Required written report format:
1. Title Page
2. Abstract
   - the abstract should summarize the entire report. A good general abstract format is:
     1-2 sentences Introduction
     1 Objective
     1-2 What you did and how?
     1-3 Results and Discussion
     1-2 Conclusions
3. Table of Contents
   - on a separate page, by itself
4. Introduction
5. Main body of report
   - should be divided into appropriate sections with subtitles (e.g. Raw Materials, Mill Process, Mill Products, etc.)
6. Conclusions
   - what did you find out that was important?
7. List of references

If you cite a fact in the paper, you have to give the source of the fact by referring to a publication, website, or personal communication listed in your references.

The report should have page numbers with the abstract on page 1. Be sure to proof-read your report before handing it in! Even better, get someone else to proof-read it for you. It is not good enough to just using a spell-checker for this course.

Seminar: We will have the seminars during the week of October 5. The exact time and date will be determined later.

Your oral presentation should reflect the content of your written report. Use PowerPoint or a similar software package as your primary seminar presentation tool. You may also want to include samples of mill products, demonstrations, etc. During the early part of the semester we will cover what constitutes a good seminar. The format will be a total of 20 minutes constituting 15 minutes of presentation plus 5 minutes for questions/answers.

Class Participation: Insightful questions and comments during visit and in subsequent discussions. I keep notes!

“Thank You” Letter: A “thanks for the great tour” letter to the contact persons at the mills you wrote your report on is required. Use an appropriate letter format and MTU letterhead to print out the letter. The letters are due on Wednesday, September 9 at 1:00 pm.

The general format of your letter should be:

1. Introduce yourself and remind them about the tour.
2. Tell them what you enjoyed about the tour.
3. Express your thanks on the behalf of yourself, the rest of the class, and MTU, in general.

An example of a thank-you letter from 2002 is included at the back of this syllabus. Notice that there were a few spelling and grammar errors. You shouldn’t have any of those in your letters! Proof-reading is very important. It is best to get someone else to proof-read for you.
List of Plants

Monday  8:00 am EDT  Smurfit-Stone (Corrugated Paperboard) - Ontonagon, MI
         10:00 am CDT  Bessemer Plywood (Structural Plywood) – Bessemer, MI
         2:00 pm CDT  Louisiana-Pacific (OSB and Composite Siding) – Hayward, WI

Tuesday  8:00 am CDT  Great Lakes Renewable Energy (Fuel Pellets) – Hayward, WI
         1:00 pm CDT  Biewer Lumber (Softwood Lumber and Treated Lumber) – Prentice, WI

Wednesday  9:00 am CDT  Domtar (Paper) – Rothschild, WI
              2:00 pm CDT  Kolbe & Kolbe (Windows) – Wausau, WI

Thursday  9:00 am CDT  Wausau Homes (Manufactured Housing) – Wausau, WI
         1:00 pm CDT  Wisconsin Veneer and Plywood (Decorative Plywood) – Mattoon, WI

Friday   8:00 am CDT  Shapes Unlimited (Commercial Displays and Furniture) – Little Chute, WI
         10:00 am CDT  Green Bay Decking (Extruded Wood/Plastic Decking) – Green Bay, WI
         2:00 pm CDT  Goodman Veneer and Lumber (Hardwood Lumber and Veneer) Goodman, WI

Accommodation during the Tour

Following is a table that lists the lodging accommodations for the four nights on the road of the tour week. I have reserved rooms at the hotels. If you know other people taking the course, try to work out room-mates and let me know your plans. I need to know whether we need to add or cancel room reservations. We will talk about this when we start our trip.

<table>
<thead>
<tr>
<th>DATE</th>
<th>CITY</th>
<th>HOTEL</th>
<th>TELEPHONE</th>
<th>TOTAL RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Hayward, WI</td>
<td>Flat Creek Hotel and Suites 10290 Hwy 27 South Hayward, WI 54843</td>
<td>715-634-4100</td>
<td>??</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Wausau, WI</td>
<td>Best Western Midway Wausau 2901 Hummingbird Road Wausau, WI 54401</td>
<td>800-482-3770</td>
<td>$79.05/night 2 queens + rollaways 70405-7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>Thursday</td>
<td>Little Chute, WI</td>
<td>Country Inns &amp; Suites Little Chute, WI 130 Patriot Drive Little Chute, WI 54140</td>
<td>920-788-8080</td>
<td>$86.59/night 2 queens/room</td>
</tr>
</tbody>
</table>
## Class List and Mill Assignment

<table>
<thead>
<tr>
<th>Name</th>
<th>Mills Assigned for Report/Presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>Green Bay Decking + Biewer Lumber</td>
</tr>
<tr>
<td>Student 2</td>
<td>Bessemer Plywood + Wisconsin Veneer and Plywood</td>
</tr>
<tr>
<td>Student 3</td>
<td>Smurfit-Stone + Domtar</td>
</tr>
<tr>
<td>Student 4</td>
<td>Goodman Veneer and Lumber + Louisiana-Pacific</td>
</tr>
<tr>
<td>Student 5</td>
<td>Wausau Homes + Kolbe &amp; Kolbe</td>
</tr>
<tr>
<td>Student 6</td>
<td>Great Lakes Renewable Energy + Shapes Unlimited</td>
</tr>
</tbody>
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Example of a Thank-You Letter:

September 5, 2002

Kevin Haustein
100 Yale Ave.
P.O. Box 76
Bessemer, MI 49911

Dear Kevin,

Thank you for allowing the Michigan Technological University (MTU) students involved in the Wood Processing class to visit your mill on August 23, 2002. We especially appreciate you operating the mill for half the day on Friday, when you were scheduled for maintenance, so that we would be able to observe the lathe running. I understand that this disrupts your schedule and we are glad that you found the time to let us tour the mill.

The Bessemer Plywood mill was the only facility in our weeklong trip that made plywood, so it was very interesting to witness the manufacturing process. The lathe is quite an incredible site all by itself. Once again on behalf of our class, thank you very much for you hospitality.

Sincerely,

NAME
MTU FW3098 Student