

**SEMESTER:** FALL 2016  
**COURSE:** PKG 850 - PACKAGING VALUE CHAIN  
**PROFESSOR:** DR. CLAIRE SAND

### **COURSE DESCRIPTION**

Packaging value chain from raw material supplier to retailers in the context of meeting current needs within the packaging arena. Global exploration of value chain strategies to increase innovation, sustainability, cost savings, quality, organizational agility, and responsiveness.

### **COURSE OBJECTIVES**

1. Understand evolution of the packaging value chain
2. Define differences between the packaging supply chain and packaging value chain
3. Critique value chain derived approaches to:
  - a) Raw material supplier – Converter relationships
  - b) Converter - Customer relationships
  - c) Customer - Distributor relationships
  - d) Distributor - Retailer relationships
4. Summarize value chain approach to address current areas of interest within the packaging industry:
  - a) Increasing innovation
  - b) Increasing sustainability
  - c) Increasing cost savings
  - d) Ensuring safety
  - e) Gaining confidence in qualifications and quality assurance
  - f) Increasing organizational agility
  - g) Increasing responsiveness and speed
  - h) Refining appropriate operations within developing economies
5. Appraise how entities within packaging sector align to add value to packaging development process
6. Generate value chain solutions to meet needs within the packaging arena
7. Communicate value chain solutions to meet a self-defined need within the packaging arena
8. Revise plans for multiple value chain solution plans to better address current industry needs

## **PROFESSOR AND OFFICE HOURS**

Based outside Minneapolis, Minnesota, Dr. Claire Sand runs Packaging Technology and Research, where she provides project based strategy, technology, consulting and coaching services to food and packaging companies. Since 2007 Dr. Sand has been an adjunct professor at Michigan State University and in 2015 assumed the role of contributing editor and packaging columnist for IFT's Food Technology magazine. In her 30 plus year career, Dr. Sand has held a variety of roles across the food science and packaging spectrum. Her mission is to fundamentally change the world with packaging science that increases shelf life and reduces food waste.



Prior to leading her own company, Sand's experience ranged from basic research and development to strategic value chain analysis and everything in between. Her portfolio includes working with Gerber - Nestle, Pillsbury- General Mills, Kraft Foods -Kraft Heinz, Dominick's -Safeway, and research institutes in Germany, Colombia, and Thailand.

Dr Sand is a committee member of the Phi Tau Sigma (food science honorary society) Strategic Relations and Chapter Affairs, a chair-elect of the IFT Food Packaging Division, a reviewer of the Journal of Food Science as well as serves as a City Human Rights Commissioner.

Dr. Sand holds a doctorate degree in Food Science and Nutrition from the University of Minnesota and received both her master's degree and bachelor's degrees in Packaging from Michigan State University.  
**[packagingtechnologyandresearch.com](http://packagingtechnologyandresearch.com)**

Office Hours: MWF from 10:00am - 2:00pm EST

Chat: Th from 9:00pm-10:00pm EST

Overall availability: Outside of office hours when you "see" me on Skype.  
If you cannot make office hours, please contact me and we can arrange a time

Communication: 4 methods can be used to communicate with Dr. Sand:

1. Skype: address is *clairekoelschsand*. Please download Skype and type in my address so you can Skype me when questions arise. This is especially important if D2L becomes inoperable.
2. Text/Telephone: 612-807-5341
3. Email: [sand@msu.edu](mailto:sand@msu.edu)
4. [Linkedin claire sand](#)

## **COURSE SCHEDULE**

*Numbers following Topic areas represent Objectives (above) that each Topic meets.*

Topics open/start on:

August 31

Topic 1: Packaging Value Chain Overview - history, strengths, weaknesses, and trends (1)

September 5

University Holiday

September 7

Topic 2: Packaging supply chain and packaging value chain benefits and weaknesses (2, 4a-h)

September 14

Topic 3: Overview of role of Packaging value chain within supplier, converter, customer, distributor, retailer, post retail (4a-h)

September 21

Topic 4: Improving Raw material Supplier – Converter relationships (3a, 5)

September 28

Topic 5: Converter Perspective: Using the value chain to attain more sustainable packaging and organizational agility (3a, 4a, 4c, 4b, 4f) Pack Expo topic

October 5

Topic 6: Improving Converter - Customer relationships (3b, 5)

October 12

Topic 7: Customer Perspective: Using the value chain to reduce supply costs, ensure safety, increase qualification effectiveness and redefine quality assurance (4c, 4d, 4e)

October 19

Topic 8: Customer Perspective: Using the value chain to build innovation process, responsiveness within small and large CPGs (4a, 4f, 4g)

October 26

Topic 9: Improving Customer – Distributor/Retailer relationships (3c, 5)

November 2

Topic 10: Distributor/Retailer Perspective: Using the value can to optimize network in large, variable and volatile economies (3c, 4h)

November 7

4:00pm cst - Optional class meeting at Pack Expo

November 11 –Friday due to Pack Expo

Topic 11: Value Chain Applications: Using the value chain to address specific goals. Topics to come from students (1-5, 8)

November 16

Value Chain Synthesis Capstone: Project Overview, optimizing student projects from prior semesters (6,7)

November 23

Value Chain Synthesis Capstone: Project solutions outlined and communicated to class (6, 7)

November 24, 25

University Holiday

December 30

Value Chain Synthesis Capstone: Project solutions critiqued by classmates and Dr. Sand (critiques due by Dec 3<sup>th</sup>) (8)

December 7

Value Chain Synthesis Capstone: Project solutions redefined and summarized (6, 7, 8)

December 12-16

Finals week

Value Chain Synthesis Capstone: Final Course Audio PPT due project due (7)

December 22

Grades posted



## COURSE PROCESS AND GRADING

University Holidays may adjust assignment deadlines. The timing is the same each week. This consistency and due dates and times are to accommodate your employment and enable you to make progress toward your degree.

- All Topic Sections will "open" on Tuesdays at midnight.
- Discussion Boards are due the following Tuesday at midnight
- Assignments are due on the following Wednesday at midnight.
- Thursday night Live Chats are held from 9:00-10:00pm EST to introduce the new topic for the week, answer questions you may have, allow students time to present topics and facilitate a more informal exchange. Attendance is not mandatory; but, highly encouraged. Chats are recorded for your reference.
- Skip week will be discussed to allow for non-planned activities that conflict with course deadlines for 1 week during the semester

Please contact me if you need an exception due to travel or unforeseen circumstances.

Within each Topic Section, there are 5 sub folders of:

**1. Audio PowerPoint**

You may wish to use headphones when listening to the files.

If you cannot hear the files, immediately contact MSU help desk for technical support

**2. Required Text and Reading**

The Packaging Value Chain. By Claire Sand. Available through bookstore or Amazon.

Additional reading will be assigned weekly.

Reading should ideally be read Wednesday and Thursday each week. This allows time for Discussion Forum comments (due the following Tuesday at midnight) and the Assignment (due the following Wednesday at midnight)

**3. Discussion Forum**

Discussion Forums are worth 10 points each week.

- The purpose of the asynchronous Discussion Forum is to communicate ideas between students and Dr. Sand and assist with assignment writing.
- Think of the Discussions as taking the place of a typical classroom discussion
  - Plan on logging in once a day for 10-15 minutes to keep up with the Discussion.
  - The Discussions are quick and somewhat informal exchanges and there are 5 posts per week.
- Comments foster an exchange between students and are guided by the professor.
- There are  $\geq 3$  Threads within the week's Discussion Forum relating to the week's Topic.
- For some Topics, one student's assignment submission will be used as "peer review" for students to explore the following week as one of the Threads within the Discussion Forum.
- The remaining 2-3 threads within the Discussion will pertain to the weekly topic.
- Discussion comments are due by Tuesday at midnight each week.
- Discussions cannot be made-up the subsequent week due to the importance of dialog.

- Students will receive points for Discussions according to the following rubric:

Points	Level of participation
0	<ul style="list-style-type: none"> <li>• Minimum number (5) of postings are not met</li> </ul>
5	<ul style="list-style-type: none"> <li>• Minimum number (5) of postings are met</li> </ul>
8	<ul style="list-style-type: none"> <li>• Minimum number (5) of postings are met</li> <li>• At least 2 postings stimulate 2 <u>substantial</u> follow-up postings for each of the 2 postings</li> </ul>
10	<ul style="list-style-type: none"> <li>• Minimum number (5) of postings are met</li> <li>• At least 5 postings stimulate 2 <u>substantial</u> follow-up postings for each of the 5 postings</li> </ul>

#### 4. Assignments:

- Assignments are worth 10 points each week and due Wednesday at midnight.
- Assignments for each topic need to be attached and sent through the D2L Drop Box associated with each Topic.
- Assignment protocol is: Name, Due Date, and Topic on first line.
- Limit of 3 pages double spaced with 1 inch margins.
  - Pages beyond 3 pages will not be graded.
  - Assignments less than 3 pages are acceptable.
- Due to the graduate level of the course, content will be graded on how well stated opinions are reinforced with examples, references, and documentation.
- Grading criteria will accompany each assignment.
- Assignments will be graded and recorded by the following week.
- Assignments can be made-up when preapproved by Dr. Sand.

#### 5. Chat:

- The On-line class Chat will be Thursday nights from 9:00-10:00pm EST and is not mandatory; but highly encouraged.
- Course concepts for the week will be presented in an informal manner and Q&A drives the Chat.
- This is a time when most students are available and does not conflict with work hours of most students.
- The Chat will be through Zoom at [msu.zoom.us](https://msu.zoom.us)
- If you will be in a public area, you may wish to use headphones, microphone to facilitate communication

## **GRADING POLICY**

The Final grade will be based on a percentage of each Topic assignment and discussion forum. Each Topic is worth 20 points (Assignments = 10 points and Discussion Forums = 10 points)

The final project is worth 40 points. Final grades will be calculated out of the total points for the course using the grading criteria. Grading will be standard MSU grading of:

> 92 = 4.0  
88 - 91 = 3.5  
84 - 87 = 3.0  
80 - 83 = 2.5  
76 - 79 = 2.0  
72 - 75 = 1.5  
68 - 71 = 1.0  
< 68 = 0.0

## **ACADEMIC POLICIES**

### **Academic Honesty**

Article 2.3.3 of the Academic Freedom Report states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the PKG 891 adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00. <https://msu.edu/unit/ombud/academic-integrity/> can be referenced for clarification of guidelines.

### **Accommodations for Students with Disabilities**

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at [rcpd.msu.edu](http://rcpd.msu.edu). Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc.). Requests received after this date may not be honored.

### **Student Behavior**

Article 2.III.B.4 and Article 2.III.B.10 of the Academic Freedom Report (AFR) applies.