

SEMESTER: FALL 2017
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

Dr Claire Sand is an industry and academic leader who focuses on decreasing food waste with packaging, food engineering, and food science. Sand's industry experience ranges from basic research, research and development, market research, and marketing. In industry, Sand integrates material science, active and intelligent packaging, ingredient technology, and food processing strategies to launch new products and extend the shelf life of existing products. 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. Dr Sand is also:



- Fellow, Institute of Food Technologists (IFT)
- Adjunct professor at Michigan State University
- Contributing editor and packaging columnist for IFT's Food Technology magazine
- IUFoST Chair of Global Food Packaging Curricula Development
- Editorial Board member of Packaging Science and Technology
- Higher Education Review Board (HERB), IFT
- Reviewer for the Journal of Food Science
- Chair of the IFT Food Packaging Division
- Committee member of Phi Tau Sigma Strategic Relations and Chapter Affairs
- Stillwater Human Rights Commissioner
- Stillwater School District Workforce Committee member

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 holds a doctorate degree in Food Science and Nutrition from the University of Minnesota and MS and BS in Packaging from Michigan State University.

packagingtechnologyandresearch.com

Office Hours: MWF from 9:00am - 2:00pm CST

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

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
4. [L](#)inkedin claire sand

COURSE SCHEDULE

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

Topics open/start on:

September 4

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

September 4

University Holiday

September 13

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

September 20

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

September 27

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

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

October 4

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

October 11

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 18

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

October 25

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

November 1

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

November 8

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

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

November 15

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

November 22, 23

Work week-University Holiday

November 29

Value Chain Synthesis Capstone: Project solutions critiqued by classmates and Dr. Sand (8)

December 6

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

December 11

Finals week

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

December 11-15

Peer Review

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 CT 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 ≥ 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"> • Minimum number (5) of postings are not met
5	<ul style="list-style-type: none"> • Minimum number (5) of postings are met
8	<ul style="list-style-type: none"> • Minimum number (5) of postings are met • At least 2 postings stimulate 2 <u>substantial</u> follow-up postings for each of the 2 postings
10	<ul style="list-style-type: none"> • Minimum number (5) of postings are met • At least 3 postings stimulate 2 <u>substantial</u> follow-up postings for each of the 3 postings

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 2 pages single spaced with 1-inch margins.
 - Pages beyond 2 pages will not be graded.
 - Assignments less than 2 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 CST 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
- 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. 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.