Regional Food Products and Processing in Michigan

Environmental Studies and Agriscience (ESA) 491
Summer 2012, session 1 (May 15 to June 28)

Tuesday and Thursday, 11:30 a.m.–2:20 p.m.
Michigan State University

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Credits: 3

Course Purpose
The purpose of this course is to examine food processing as a diverse and dynamic feature of Michigan’s economy and agrifood landscape, and to explore its historical and regulatory context.

Course Objectives
1) To explore the historical development of food processing in Michigan.
2) To engage with a diversity of current Michigan processors, artisanal and industrial, producing at small and large scales.
3) To think about differences between small and large scales of processing and between artisanal and industrial approaches to processing.
4) To understand the historical development of food safety regulations and current issues in food safety policy.

Learning Outcomes
Students will be able to:
1) communicate the historical importance of food processing to Michigan’s economy and agrifood landscape;
2) describe the motivations, challenges, and activities of a diversity of processors;
3) characterize divergent scales of and approaches to processing and discuss the connections between them; and
4) articulate common justifications for food safety regulations.

Readings
Readings are listed within each session below. They are posted on the course website.
Assignments and Grading

Writing Assignments Each Session (30% of the course grade)
Short writings on course readings are due by midnight on the night before class. Writings are a minimum length of 150 words. Writings must respond to the session’s discussion questions, and they will be graded for substance and for quality of writing (spelling, grammar, and construction).

Mid-Term Paper (20% of the course grade)
Due June 21 at the beginning of class (11:30 a.m.)
- Length is minimum 8 pages, double-spaced, 1” margins all around, Times New Roman 12-pt font.
- Bibliography and any end notes are in addition to the page requirement.

Mid-Term Exam (20% of the course grade)
A mid-term exam on May 31 covers the basic concepts introduced during the initial section of the course. It is one hour long, open-book and open-notes, and consists of short-answer and short-essay questions.

Presentation (10% of the course grade)
Students present their mid-term paper to the class. The final class session (June 28) is reserved for presentations. Presentations are 10 minutes long, with an additional 5 minutes for questions.

Attendance and Participation (20% of the course grade)
Students are expected to attend class in person and to participate in class discussions. This is particularly important as many sessions feature a guest speaker. One class may be missed by prior arrangement, i.e., by verbal or email communication before the start of class.

Grading Scale
94 to 100% - 4.0
87 to 93% - 3.5
80 to 86% - 3.0
75 to 79% - 2.5
70 to 74% - 2.0
65 to 69% - 1.5
60 to 64% - 1.0
<60% - no credit
Schedule

Part 1: Background

Session 1. Course Introduction and Historical Overview of Food Processing (May 15)

Objectives
• Course housekeeping:
  • To share our backgrounds and interests and, where applicable, experience in food processing (including activities like home canning).
  • To review the syllabus and course requirements and clarify any questions.
  • To decide on topics for the June 21 and June 26 sessions and speakers/field trips for some other sessions.
  • To review some of the historical developments in food processing in Michigan and elsewhere

Guest Speaker
• Dr. Mark Uebersax, Professor Emeritus, MSU Department of Food Science and Human Nutrition

Session 2. Food Processing: The Current Situation (May 17)

Due
Writing assignment, by midnight before class, on these discussion questions:
• Discuss two processing techniques: When were they invented or discovered? What needs did they address—what food supply problems did they overcome?
• Identify three ways in which processing has changed in Michigan over the past century or so. Make sure to cite your sources—identify where you found the information. What do you think has driven these changes?

Objectives
• To understand the practical challenges facing food processor entrepreneurs.
• To become familiar with the current state of food processing in Michigan.

Required Readings
Historical readings related to Session 1:
Contemporary readings—read in this order:

Optional Readings

Guest Speaker
• Ron Steiner, Regional Business Counselor for MSU Product Center for Agriculture and Natural Resources, and Executive Director of the Starting Block business incubator kitchen in Hart, Mich.
  “Growing the food processing sector in Michigan from start-ups to sustainable businesses”

Session 3. Regulation of Food Processing: History (May 22)

Due
Writing assignment, by midnight before class, on these discussion questions:
• Discuss two processing techniques: When were they invented or discovered? What needs did they address—what food supply problems did they overcome?
• Identify three ways in which processing has changed in Michigan over the past century or so. What do you think has driven these changes?

Objectives
• To explore changes in food production technologies and distribution systems during the nineteenth century.
• To examine the relationship of these changes to food safety legislation in the US.
• To consider the implications of government regulation for agrifood production.

Required Readings (read in this order)

Optional Readings

**Video**

- Princeton University Press interview with Bee Wilson about *Swindled*, 30 min. (This book appears in the Optional Readings list above.)

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**Session 4. Policy Affecting Food Processing: Current Developments (May 24)**

**Due**

Writing assignment, by midnight Wednesday night:

- Identify two measures that the state government could take to encourage a specific type of processing.
- What would those measures achieve:
  - Who would gain from them, and in what ways?
  - Who would lose, and in what ways?

**Objectives**

- To explore trends in policy affecting food processing.
- To examine current issues, such as the cottage food law and the raw milk controversy.

**Required Readings**

Read the first two articles before the last two articles. The first two are general, and the second two are about specific policies.


**Optional Readings**


**Guest Speaker**

- Byron Beerbower, Compliance Manager, Food and Dairy Division, Michigan Department of Agriculture and Rural Development
Session 5. “Artisanal” and “Industrial” Production (May 29)

Due
Writing assignment, by midnight Monday night 5/28
• What are two characteristics that you associate with “artisanal” food?
• What are two characteristics that you associate with “industrial” food?
• Does it matter to you whether a food is “artisanal” or “industrial”? In what ways does it matter, and in what ways doesn’t it?

Objectives
• To examine different approaches to processing.
• To consider the implications of different scales of production.

Required Readings

Highly Recommended Optional Readings

Optional Reading

Review for Mid-Term (exam to be given in Session 6, May 31)

Field Trip
• Incu-BaKe shared-use commercial kitchen, Holt

Part 2: Survey of Michigan Food Products

General Objectives of Each Session
• To review the history of these products in Michigan.
• To gain a basic understanding of the motivations, challenges, and activities of processors.
• To explore the connections of these products with other agrifood products and developments.
Session 6. Dairy Products (May 31)

Mid-term exam
• Today in class

No Required Reading

Optional Reading

Field Trip
• MSU Dairy Plant

Session 7. Fruits and Vegetables (June 5)

Due
Writing assignment, by midnight Monday night 6/4.

Required Readings

Optional Readings

Guest Speaker
• Leigh Anne Higgins, Principal Scientist, Nestle Nutrition—Gerber Products Co., Fremont, Mich.
Session 8. Meat (June 7)

Due
Writing assignment, by midnight Wednesday night 6/6.

Required Readings

Optional Reading

Field Trip
- Merindorf Meats, Mason, Mich.

Session 9. Bread and Grains (June 12)

Due
Writing assignment, by midnight Monday night 6/11.

Required Readings
  - “Apocalypse chow.” Chapter 2, pp. 10–23
  - “The great cereal rush.” Chapter 4 (excerpt), pp. 36–41.

Optional Readings
Field Trip
• Stone Circle Bakehouse, Holt

Session 10. Beer and Wine (June 14)

Due
• Writing assignment, by midnight Wednesday night 6/13.

Required Readings

Guest Speakers
• Dr. Paolo Sabbatini, MSU Department of Horticulture: “Grape and wine production in Michigan: challenges and opportunities for a cold-cool climate viticultural region in the U.S.”
• Dr. Rob Sirrine, MSU Extension, Leelanau County: “Hops production in Michigan”

Session 11. Paper Peer Reviews (June 19)

Due
• Draft of term paper, by midnight Monday night 6/18.

Field Trip
• MSU Meat Laboratory, Anthony Hall

Session 12. Soda Pop and Cider (June 21)

Due
• Paper brought to class or posted online before class.

Optional Readings

Field Trip
• Uncle John’s Cider Mill, St. Johns, Mich.
Session 13. Food Processing in the Upper Peninsula (June 26)

Due
• Writing assignment, by midnight Monday night 6/25.

Required Readings
Historical:

Contemporary:

Optional Reading

This topic was briefly introduced in an earlier session and will be wrapped up in this session.

Guest Speaker
• Dr. Russ Magnaghi, Professor, Department of History, Northern Michigan University, Marquette, Mich.

Session 14. June 28

Presentations in Class
Course Wrap-Up and Evaluation