

# Master Brewers Brewery Packaging Technology Course

April 15–27, 2018 • University of Wisconsin | Madison, Wisconsin, U.S.A.

## WEEK ONE Sunday, April 15 – Saturday, April 21, 2018

**Course Director:** Kevin Finger, *AB Fairfield (retired)*

### Sunday, April 15

All day Students pick up course information packets when checking in at the front desk.  
6:15 p.m. **Reception**—Welcome Gathering for Students and Faculty  
Lowell Center Main Floor Reception Area  
7:00 p.m. **Dinner and Orientation**—Lowell Center Dining Hall (Casual Attire)  
*Kevin Finger, Course Director*

### Monday, April 16

8:00 a.m. – 8:30 a.m. **Pyle Center, Room 235**  
**Class Introduction, Case Study Team Assignments**  
*Kevin Finger, Course Director*  
8:30 a.m. – 9:45 a.m. **PET Bottles for Beer Packaging**  
*Frank Embs, Indorama Ventures*  
10:00 a.m. – 12:00 p.m. **Glass Bottle Manufacturing and Quality Control**  
*Evan O'Connor, Longhorn Glass*  
12:00 p.m. – 1:00 p.m. Lunch at the Pyle Center  
1:00 p.m. – 2:15 p.m. **Two-Piece Aluminum Can and End Manufacturing**  
*Bill Forsythe, Retired*  
2:30 p.m. – 4:30 p.m. **Can Double-Seam Technology**  
*Bill Forsythe, Retired*  
4:45 p.m. – 5:00 p.m. **Case Study Set-up**  
*Kevin Finger, Course Director*

### Tuesday, April 17

8:00 a.m. – 12:00 p.m. **Pyle Center, Room 235**  
**Beer Filling Technology**  
*James R. Dillman, KHS, USA*  
12:00 p.m. – 1:00 p.m. Lunch at the Pyle Center  
1:00 p.m. – 2:00 p.m. **Microfiltration of Beer**  
*Conor O'Hara, 3M Purification*  
2:15 p.m. – 3:30 p.m. **Small Scale Packaging Systems**  
*Kevin Finger, Course Director*  
3:45 p.m. – 5:00 p.m. **Bottle Crown Manufacturing and Crowning Operations**  
*Juan Carlos Gomez, Crown Famosa*

### Wednesday, April 18

8:00 a.m. – 10:15 a.m. **Pyle Center, Room 235**  
**Single-Valve Keg Packaging**  
*Andy Brewer, Petainer Manufacturing USA*  
10:30 a.m. – 12:15 p.m. **Bottle Labels**  
*Roman Artz, Inland Packaging*  
12:15 p.m. – 1:00 p.m. Lunch at the Pyle Center  
1:00 p.m. – 3:30 p.m. **Labeling Operations and Troubleshooting**  
*Frank Kaczmarek, Kronos, Inc.*  
3:45 p.m. – 5:15 p.m. **Package Inspection in the Brewing Industry**  
*Jeff DeVoy, Heuft, USA*

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## Thursday, April 19

7:30 a.m.

7:30 a.m. – 9:15 a.m.

9:30 a.m. – 11:30 p.m.

11:45 a.m. – 1:00 p.m.

1:15 p.m. – 1:45 p.m.

2:00 p.m. – 4:00 p.m.

4:00 p.m. – 5:00 p.m.

5:00 p.m. – 5:30 p.m.

5:30 p.m. – 7:15 p.m.

7:30 p.m.

## Field Trip

Bus Departs from the Lowell Center for Kronos, Inc.

Bus Trip to Kronos, Inc.

### Tour of Kronos, Inc.

Lunch at Culvers in Franklin, WI

Bus trip to MillerCoors Milwaukee Brewery Packaging Center

### Tour of the MillerCoors Milwaukee Brewery Packaging Center

Refreshments and Q&A Discussion at MillerCoors Stables

Shopping at the Miller Store

Bus trip back to Lowell Center

Dinner provided at Lowell Center

## Friday, April 20

8:00 a.m. – 12:00 p.m.

12:00 p.m. – 1:00 p.m.

1:00 p.m. – 5:00 p.m.

## Pyle Center, Room 235

### General Principles for Packaging Line Design and Control

*Robert Nantel, Gebo Cermex Canada Inc.*

Lunch at the Pyle Center

### Package Department Maintenance Best Practices

*Greg Harris and Mike Sanchez, MillerCoors; Michael DuMont, DuMont Consulting, LLC*

## Saturday, April 21

8:00 a.m. – 10:30 p.m.

10:45 a.m. – 12:00 p.m.

12:00 p.m. – 1:00 p.m.

1:00 p.m. – 3:00 p.m.

3:15 p.m. – 5:15 p.m.

## Pyle Center, Room 235

### Packaging Microbiology

*Bill Maca, HWM Yeast Solutions LLC*

### Sleeved Cans

*Peter Parker, Verst Logistics; Sam Cruz, Against the Grain Brewery*

Lunch at the Pyle Center

### Case Packing and Uncasing

*Michael Woehl, Standard-Knapp, Inc.*

### Brewery Safety

*Mark Jaeggi, Sabhailteacht Solutions*

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## WEEK TWO Sunday, April 22 – Friday, April 27, 2018

Course Director: Kevin Finger, *AB Fairfield (retired)*

### Sunday, April 22

**Free Day! No Scheduled Activities**

### Monday, April 23

8:00 a.m. – 12:00 p.m.

#### **Pyle Center, Room 235**

**Principles of Packaging Department Cleaning and Water Treatment**

*Jim Diamantis & Barry Owings, Zee Company*

12:00 p.m. – 1:00 p.m.

Lunch at the Pyle Center

1:00 p.m. – 3:30 p.m.

**Bottle Washing, Tunnel Pasteurization/Pasteurizer Maintenance**

*Dave Duff & Ross McKenzie, BW Integrated Systems*

3:45 p.m. – 5:00 p.m.

**Palletizing & Depalletizing Operations**

*Dave Meyer, BW Container Systems*

5:15 p.m. – 7:00 p.m.

**Tour of the UW Pilot Brewery (optional)**

*Jon Roll, UW Madison*

### Tuesday, April 24

8:00 a.m. – 9:45 a.m.

#### **Pyle Center, Room 235**

**Overview of Multipack Paperboard Production and Multipackaging Machinery**

*Graham Hand, Graphic Packaging International*

10:00 a.m. – 11:30 a.m.

**Operations Management Overview**

*Kevin Finger, Course Director*

11:30 a.m. – 12:15 p.m.

Lunch at the Pyle Center

12:15 p.m. – 12:30 p.m.

Load on the Bus at the Pyle Center

12:30 p.m. – 1:30 p.m.

Bus Trip to the New Glarus Brewery in New Glarus, Wisconsin

1:45 p.m. – 3:00 p.m.

**Tour of the New Glarus Brewery**

3:00 p.m. – 3:45 p.m.

Refreshments & Networking

4:00 p.m. – 5:00 p.m.

Return Trip to the Lowell Center

### Wednesday, April 25

8:00 a.m. – 10:00 a.m.

#### **Pyle Center, Room 235**

**Conveyors—Types, Uses, Maintenance, and Troubleshooting**

*Chuck McGrady and Lauren Forseth, Rexnord Industries*

10:15 a.m. – 12:00 p.m.

**Designing & Implementing Quality System**

*Gary Nicholas, Nicholas Brewing Projects*

12:00 p.m. – 1:00 p.m.

Lunch at the Pyle Center

1:00 p.m. – 3:00 p.m.

**Modern Package Coding Technology**

*Brian Burke, Videojet Technologies, Inc.*

3:15 p.m. – 5:15 p.m.

**Packaging Quality Assurance**

*Mike Lachut & Joe Bustos, North American Breweries*

### Thursday, April 26

8:00 a.m. – 12:00 p.m.

#### **Pyle Center, Room 235**

**Student Team Presentations to the Class**

*Team 1, Team 2, Team 3, Team 4, Team 5, Team 6*

**Packaging Case Study Review Panel**

*Panel members: Mike Lachut (North American Breweries), Joe Bustos (North American Breweries), Kevin Finger (Course Director)*

12:00 p.m. – 1:00 p.m.

Lunch at the Pyle Center

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- 1:00 p.m. – 2:30 p.m.     **Food Safety and HACCP**  
*Tatiana Lorca, Ecolab, Inc.*
- 2:45 p.m. – 5:00 p.m.     **Beer Flavor Training and Effects of Packaging Materials on Beer Flavor**  
*Roy Desrochers, Tufts University Sensory and Science Center*
- 6:30 p.m. – 7:00 p.m.     **Reception**—Beer Room, Lowell Center, Room 118
- 7:00 p.m.                     **Dinner**—Lowell Main Dining Hall (Informal Attire)  
*Closing Remarks and Awarding of Certificates*

### Friday, April 27

- 6:30 a.m. – 9:00 a.m.     Breakfast and Hotel Check Out by 11:00 a.m.  
(Note: The Lowell Center Will Store Your Luggage If You Need to Check Out Early)
- 9:00 a.m. – 11:00 a.m.     **IBD General Certificate (Packaging) Exam**—Pyle Center, Room DE314