

# 2021 Master Brewers Brewery Maintenance Course

August 15 – September 24, 2021

**Course Director: Darren Goodlin**

All times shown in Central Daylight Time (CDT)

## **Sunday, August 15: Class Orientation**

15:00 – 16:00 – Course Introduction and Case Study Overview

## **Week 1 – System – Utility**

### **On your own content (aka Self Study): August 16 – 19**

- Supply Water, Jack Bland & Rick Brundage, ChemTreat, Inc.
- Steam, Steve Huffman, Mead O'Brien, Inc.
- Compressed Air, John Molnar, Rogers Machinery
- Chiller Systems, Dan Stromberg, GF Piping Systems

## **Week 1 Virtual In Class: Friday, August 20**

09:00 – 10:30 – Supply Water, Jack Bland & Rick Brundage, ChemTreat, Inc.

10:30 – 12:00 – Steam, Steve Huffman, Mead O'Brien, Inc.

12:00 – 13:00 – Break

13:00 – 14:30 – Compressed Air, John Molnar, Rogers Machinery

14:30 – 16:00 – Chiller Systems, Dan Stromberg, GF Piping Systems

16:00 – 17:00 – Case Study Q&A – Darren Goodlin, Instructors as available

## **Week 2 – Safety**

### **On your own content: August 22 – 26**

- Confined Spaces, Mark Jaeggi, Sabhailteacht Solutions, LLC
- Hazard Communication, Mark Jaeggi, Sabhailteacht Solutions, LLC
- Lock out, Tag out, Try out (LOTO), Mark Jaeggi, Sabhailteacht Solutions, LLC
- Powered Industrial Trucks, Mark Jaeggi, Sabhailteacht Solutions, LLC
- Personal Protective Equipment (PPE), Mark Jaeggi, Sabhailteacht Solutions, LLC

## **Week 2 Virtual In Class: Friday, August 27**

09:00 – 09:30 – Case Study Check in – Darren Goodlin, Goodlin Process Solutions

09:30 – 12:00 – Safety -- Mark Jaeggi, Sabhailteacht Solutions, LLC

12:00 – 13:00 – Break

13:00 – 14:30 – Safety -- Mark Jaeggi, Sabhailteacht Solutions, LLC

14:30 – 15:00 – Case Study Q&A – Darren Goodlin, Goodlin Process Solutions

### **Week 3 – System – Processing System Technologies, Equipment & Utilities**

#### **On your own content: August 29 – September 2**

Pumps, Randy Verges, Fristam Pumps USA  
CO2 & CO2 Systems, Gabriel Dominguez, Pentair  
Sanitation / Clean in Place, Oliver Meinhold, Zee Loeffler  
Stainless Steel Passivation, Oliver Meinhold, Zee Loeffler  
Waste Water, Jeff Van Voorhis, Symbiont

### **Week 3 Virtual In Class: Friday, September 3**

09:00 – 10:00 – Waste Water, Jeff Van Voorhis, Symbiont  
10:00 – 12:00 – CO2 & CO2 Systems, Gabriel Dominguez, Pentair  
12:00 – 13:00 – Break  
13:00 – 14:30 – Pumps, Randy Verges, Fristam Pumps USA  
14:30 – 16:30 – Sanitation / Clean in Place & Stainless Steel Passivation, Oliver Meinhold, Zee Loeffler  
16:30 – 17:00 – Case Study Q&A – Darren Goodlin, Goodlin Process Solutions

### **Week 4 – Facility, Maintenance Program Maintenance Tools, Technology**

#### **On your own content: September 5 – 9**

- Floors and Drains, Randy Butera, Sika Corporation
- Facilities, Chris Hyberger, New Glarus Brewing Company
- Sustainability, Chris Hyberger, New Glarus Brewing Company
- Maintenance Software, Chris Hyberger, New Glarus Brewing Company
- Training, Larry Posluszny, Accel Performance Solutions, LLC
- SOPs (Creating and Maintaining), Larry Posluszny, Accel Performance Solutions, LLC

### **Week 4 Virtual In Class: Friday, September 10**

09:00 – 12:00 – Facilities, Sustainability & Maintenance Software, Chris Hyberger, New Glarus Brewing  
12:00 – 13:00 – Break  
13:00 – 15:00 – Training & SOPs, Larry Posluszny, Accel Performance Solutions, LLC  
15:00 – 16:30 – Floors and Drains, Randy Butera, Sika Corporation  
16:30 – 17:00 – Case Study Q&A – Darren Goodlin, Goodlin Process Solutions

## **Week 5 – Finance, Technologies, Automation, Stainless Steel**

### **On your own content: September 12 – 16**

- Application of Key Financial Tools in Decision Making, Jaime Jurado
- PID Controller Tuning, Bob Rice, Control Station
- Brewhouse Automation
- Valves, Charley Phipps, Pentair
- Electrical Power Distribution, Kelly White, Anheuser-Busch (Retired)

### **Week 5 Virtual In Class: Friday, September 17**

09:00 – 10:00 – Valves, Charley Phipps, Pentair

10:00 – 12:00 – Brewhouse Automation,

12:00 – 13:00 – Break

13:00 – 14:00 – PID Controller Tuning, Bob Rice, Control Station

14:00 – 15:15 – Electrical Power Distribution, Kelly White, Anheuser-Busch (Retired)

14:15 – 16:30 – Application of Key Financial Tools in Decision Making, Jaime Jurado

16:30 – 17:00 – Case Study Q&A – Darren Goodlin, Goodlin Process Solutions

## **Week 6 Project Management**

### **On your own content: September 19 – 23**

- Project Management, Pat Buchana, Barry-Wehmiller Design Group
- Design Modifications, Pat Buchana, Barry-Wehmiller Design Group
- Bid Review, Pat Buchana, Barry-Wehmiller Design Group
- Instrumentation, Darren Goodlin, Goodlin Process Solutions
- Stainless Steel and Welding Insights, Darren Goodlin, Goodlin Process Solutions

### **Week 6 Virtual In Class: Friday, September 24**

09:00 – 10:30 – Project Management, Design Modifications & Bid Review, Pat Buchana, Barry-Wehmiller Design Group

10:30 – 12:00 – Instrumentation & Stainless Steel and Welding Insights, Darren Goodlin, Goodlin Process Solutions

12:00 – 13:00 – Break

13:00 – 17:00 – Case Study Presentations (20 – 25 minutes each), Student Teams

17:00 – Course wrap up