

# **Business of Craft Beer 102: Business Operations in Craft Beer**

The University of Vermont

CDE\_BCB102

## **FACULTY AND COURSE FACILITATOR**

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This course is designed with four faculty co-leads: Nick Posloski, Rod Waite, Gary McMullen, and Oralee Corbett, as well as a number of subject matter experts who offer their wealth of experience.

As faculty co-leads and industry experts, Nick, Rod, Gary, and Oralee work with the other experts to review your materials, answer content questions, participate in course discussions, and deliver the online sessions. The course schedule at the end of this syllabus lists who is the lead instructor each week.

**Course Facilitator:** Michelle Forster

**Course Facilitator Contact Information:** [Fosterbrewing@gmail.com](mailto:Fosterbrewing@gmail.com)

As a course facilitator, Michelle Forster is your point of contact regarding general class issues, such as, discussion board grades, technical/Blackboard problems, and other general course questions.

To email Michelle, Nick, Rod, Gary, or Oralee directly, use the email link in the Blackboard navigation bar. The course team will strive to answer questions and concerns within twenty-four hours during weekdays. Please note that travel and other commitments may create a delay in response time.

## **COURSE OVERVIEW**

### **Course Description**

In Business Operations in Craft Beer, you'll learn about how the many components of craft brewery operations and supply chain must fit together to build a profitable, efficient, and sustainable business. Students will address key topics such as sourcing and procurement, quality systems, new brewery start-up and capacity planning, forecasting, production planning, inventory, logistics, and environmental sustainability.

UVM has partnered with Ekos Brewmaster, the industry leading software solution for managing the business side of your brewery. Throughout the course we will integrate the Ekos software into our learning modules, so that you will benefit from using the software in real world case studies. Whether you are looking to be hired by a brewery or start your own brewery, knowledge of how to use Ekos, combined with the practical understanding of brewery operations, will help you to run a more efficient and effective business so that you can be more successful.

### **Course Objectives**

By the end of the course, participants will be able to:

- Demonstrate a broad understanding of craft brewery operations, and how all the steps in the supply chain function together to bring beer to the consumer efficiently and with reliability.
- Outline the overall craft beer production process and the unit operations that must be coordinated to convert raw materials into finished beer, and the pros and cons of different packaging options.
- Describe sourcing and procurement strategies for raw materials, packaging supplies and brewery equipment, and determine best practices for receiving materials into the brewery, including practical ways to verify the quantity and quality of the items being received.
- Describe how orders are fulfilled and beer is shipped from the brewery to the customer, the importance of good information flow from customers back to the brewery, and how to track and schedule returns from the market such as, kegs, pallets and returnable bottles.
- Articulate the importance of making good beer and what systems need to be in place to make this happen reliably, as well as the role of utilities and maintenance and health and safety considerations within a craft brewery.
- Monitor and manage the risks that can occur within a craft brewery operation by examining a number of scenarios relating to materials supplies, production significant disasters, and product quality.

- Articulate the processes and technologies that can make a craft brewery more environmentally sustainable and efficient, and how information technology (IT) systems and standard operating procedures can enable an efficient and stable brewery operation.
- Describe the craft brewery planning processes, along with the time horizons and associated activities at each horizon, and identify key considerations for planning the location, layout and distributor network for a new craft brewery.
- Outline the criteria used to properly size a craft brewery and how to effectively plan for capacity growth in the future, acknowledging the relationship between long term planning and budgeting.
- Determine how to effectively schedule production and outbound finished beer shipments, along with how to manage inventory of raw materials and finished goods.

### **Course Duration**

8 Weeks

### **Course Flow**

Each module week begins each Friday and goes to the following Thursday night. Each new module will open on Friday at 12:00 am ET.

### **Live/Synchronous Sessions**

The class will meet online on **Thursdays at 7:00 pm ET** for one hour.

### **Course Work**

We estimate the student will dedicate at least 8-10 hours a week to course work. This will be a combination of readings, discussion boards, collaborative assignments, etc.

## **PROGRAM REQUIREMENTS AND GRADING**

### **Program Requirements**

This is a non-credit, certificate based, program. At the conclusion of the program students do not receive a letter grade but instead receive a certificate of completion. In order to receive a certificate of completion for the Business of Craft Beer Program, students must successfully complete three Business of Craft Beer courses. Students also have the option of creating a Capstone Project. The Capstone Project takes place following completion of three courses.

## Course Grading

All students who earn a 70% or greater will receive a passing grade towards completion of their certificate. Successful completion of this course is determined by the following factors:

- **Peer Review and Discussion Boards:** Timely completion and participation in weekly peer review and discussion boards 80%.
- **Weekly Quizzes:** 20% of your grade is based off of the completion of the eight module quizzes. You can take each quiz as often as you like, and Blackboard will automatically select the highest grade.

Students are encouraged to participate every week and are able to pass/miss two weeks of discussion without any penalty. Blackboard will automatically drop your two lowest discussion grades. Please notify the course facilitator if you plan on missing two weeks.

Our goal of dropping your two lowest discussion board grades is to provide you the opportunities to focus on the assignments that are most important to you while balancing your class load.

## Late Submissions

Timely participation is an important component of the course, and maximizes both your understanding of the material and the creation of a collaborative learning experience as you offer thoughtful feedback to your peers.

Submissions based on a 10-point system will receive the following deductions:

- > 1 week late: .25 points deducted from grade
- > 2 weeks late: .5 points deducted from grade
- > 3 weeks late: .75 points deducted from grade
- > 4 weeks late: 1 point deducted from grade

Submissions based on a 100-point system will receive the following deductions:

- > 1 week late: 2.5 points deducted from grade
- > 2 weeks late: 5 points deducted from grade
- > 3 weeks late: 7.5 points deducted from grade
- > 4 weeks late: 10 points deducted from grade

## **Feedback on Submissions**

The instructors and course facilitators will provide grading and feedback within 7-10 days from an activity's due date.<sup>[1]</sup><sub>[SEP]</sub>

## **Discussion Boards**

The discussion boards are an important part of your learning experience. Most students find participating in discussions help them understand the course content, deepens their learning, and strengthens their ability to think critically.

- Each week you are asked to share an original post on the discussion board and provide at least one response post with substantive feedback to your peer's work. The feedback can draw from your experience, include questions for your colleagues in the class, or bring in additional resource to grow the conversation around the assigned topics. We are looking for more than positive reinforcement and high fives.
- The course instructor and guest instructors leave feedback and critiques on your posts in the discussion board. In this way, everyone can learn from their feedback.
- Your weekly discussion board grade is determined by the course facilitator based on the rubric below.
- Your grade will be entered into the system the week after it is assigned.

Each Discussion Board (DB) grade is based on the following rubric:

Criteria	Master	Adept	Competent	Needs Improvement
<b>Content of Original Post</b>	<b>7 points</b> Responds to the discussion prompt in depth, provides insight and application of week's materials	<b>5 points</b> Responds to the discussion prompt and provides examples of insight or application	<b>3 points</b> Responds to the discussion prompt with little expansion, insight, or application	<b>0 points</b> No post
<b>Content of Response Post(s)</b>	<b>3 points</b> Includes questions, offers critique, and fosters collaboration	<b>2 points</b> Offers constructive feedback but may not grow the conversation	<b>1 point</b> Post(s) are not substantive	<b>0 points</b> No post(s)

## COURSE SCHEDULE

Module	Dates	Materials	Instructors and Guest Speakers
<b>Brewery Operations and Supply Chain Fundamentals</b>	Week 1	<ul style="list-style-type: none"> <li>● Course Syllabus</li> <li>● Supply Chain Infographic</li> <li>● Supply Chain Management presentation</li> <li>● Defining Supply Chain Management: A Historical Perspective and Practical Guidelines</li> <li>● The Supply Chain Management Processes</li> <li>● The Beer Game video</li> <li>● Introduction to Ekos-</li> </ul>	Instructor: • Nick Posloski  Guest: • Alec Johnson, Senior Sales Manager at Ekos

		Brewmaster	
<b>Making Craft Beer</b>	Week 2	<ul style="list-style-type: none"> <li>• The brewing process, Raw Materials, Packaging and Warehousing</li> <li>• Liz L'Etoile – Four Star Farms interview</li> <li>• Lamplighter Brewery interview</li> <li>• Additional readings and links in the course materials.</li> <li>• Ekos Exercise</li> </ul>	Instructor: • Nick Posloski
<b>Long Term Planning - Building a Craft Brewery, Considerations, Location, Sizing, and Capacity</b>	Week 3	<ul style="list-style-type: none"> <li>• A Brewer's View on a Modern Brewhouse Project</li> <li>• Long Term Planning presentation</li> <li>• Additional readings and links in the course materials.</li> <li>• Ekos Exercise</li> </ul>	Instructor: • Rod Waite
<b>Sourcing and Procurement of Materials</b>	Week 4	<ul style="list-style-type: none"> <li>• Screamin' Hill Brewery interview</li> <li>• Four Star Farms interview</li> <li>• Sample Bill of Materials</li> <li>• Total Landed Costs</li> <li>• Additional readings and links in the course materials.</li> <li>• Ekos Exercise</li> </ul>	Instructor: • Steve Rockhold
<b>Demand Management - Forecasting, Inventory: Receiving and Shipping</b>	Week 5	<ul style="list-style-type: none"> <li>• Methods of Demand Forecasting</li> <li>• Trend Projections Method</li> <li>• Steps in Demand Forecasting</li> <li>• Demand Forecasting</li> <li>• Sales Forecasting</li> <li>• The Near Beer Game</li> <li>• Additional readings and links in the course materials.</li> <li>• Ekos Exercise</li> </ul>	Instructor: • Steve Rockhold
<b>Mid- and Short-Term Planning and Scheduling</b>	Week 6	<ul style="list-style-type: none"> <li>• Production Planning and Scheduling</li> <li>• Human Resources &amp; Staffing</li> </ul>	Instructor: • Nick Posloski

		<ul style="list-style-type: none"> <li>• Key Performance Indicators and Performance Measures</li> <li>• Ekos Exercise</li> </ul>	Guest: <ul style="list-style-type: none"> <li>• Daniel Griffin, Brewmaster and Founding Partner at Outerbelt Brewing</li> </ul>
<b>Quality</b>	Week 7	<ul style="list-style-type: none"> <li>• Quality management system</li> <li>• Policies and roles that support quality</li> <li>• Good laboratory practices</li> <li>• Developing a quality program</li> <li>• Troubleshooting issues and quality auditing</li> <li>• Readings and links are in the course materials</li> <li>• Ekos Exercise</li> </ul>	Instructor: <ul style="list-style-type: none"> <li>• Oralee Corbett</li> </ul>
<b>Maintenance, Utilities, and Environmental Sustainability</b>	Week 8	<ul style="list-style-type: none"> <li>• Maintenance and Utilities</li> <li>• Sustainability</li> <li>• Q&amp;A Blog: Environmental Sustainability at The Alchemist with Jen Kimmich</li> <li>• Case Study: Water Usage at Long Trail with Matt Quinlan</li> <li>• Additional readings and links in the course materials</li> <li>• Ekos Exercise</li> </ul>	Instructor: <ul style="list-style-type: none"> <li>• Rod Waite</li> </ul>

**Student Learning Accommodations:** In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations via an accommodation letter to faculty with approved accommodations as early as possible each semester. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course.

Contact ACCESS: A170 Living/Learning Center; 802-656-7753; [access@uvm.edu](mailto:access@uvm.edu); [www.uvm.edu/access](http://www.uvm.edu/access)

UVM's policy on disability certification and student support: [www.uvm.edu/~uvmppg/ppg/student/disability.pdf](http://www.uvm.edu/~uvmppg/ppg/student/disability.pdf)

**Religious Holidays:** Students have the right to practice the religion of their choice. If you need to miss class to observe a religious holiday, please submit the dates of your absence to me in writing by the end of the second full week of classes. You will be permitted to make up work within a mutually agreed-upon time.

**Academic Integrity:** The policy addresses plagiarism, fabrication, collusion, and cheating. <http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf>

**Grade Appeals:** If you would like to contest a grade, please follow the procedures outlined in this policy: <http://www.uvm.edu/~uvmppg/ppg/student/gradeappeals.pdf>

**Grading:** For information on grading and GPA calculation, go to [www.uvm.edu/academics/catalogue](http://www.uvm.edu/academics/catalogue) and click on Policies for an A-Z listing.

**Code of Student Rights and Responsibilities:**  
[www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf](http://www.uvm.edu/~uvmppg/ppg/student/studentcode.pdf)

**FERPA Rights Disclosure:** The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974.  
<http://www.uvm.edu/~uvmppg/ppg/student/ferpa.pdf>