



# **Bread Manufacturing Process**

#### COURSE SYLLABUS - ADVANCED COURSE

### COURSE SPONSOR





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### RESOURCES

#### BREAD MANUFACTURING PROCESSING

#### Cost: ABA Members: \$250 | Non-Member: \$500

The course is a fully digitized course offered through the academy portal that focuses on each step of the manufacturing process, from scaling through the packaging of the finished product. The course is divided into two sections comprised of 20 modules.

#### The Course follows the manufacturing process flow:

- $\checkmark$  Explain the purpose of each step of the manufacturing process.
- ✓ Describe dough and finished product characteristics of over-or under
- ✓ Performing each step in the manufacturing process.
- ✓ Identify corrections for over-or under-performing each step in the manufacturing process.
- ✓ Identify critical quality production controls for each step in the manufacturing process.
- ✓ Identify common equipment used for each step in the manufacturing process.
- ✓ Explain each unique step of each dough system.
- ✓ Identify acceptable benchmark ranges for each dough system (unique ingredients, time, temperature, equipment, pH/TTA, etc.).
- ✓ Explain common adjustments for each dough system.
- ✓ Identify the advantages and disadvantages of each dough system
- ✓ Compare and contrast the dough systems.
- ✓ Describe how dough temperature (and age) affects the manufacturing process.
- ✓ Identify common adjustments to each manufacturing process step.

#### FEATURES

- Fully digitized through the Academy Portal
- Duration: 8 hours, up to six-weeks to finish.
- Available languages: English & Spanish
- Final Test: 80% Final GPA to receive certificate.

#### WHO SHOULD ENROLL

• For those who want to manage or supervise and bakery shift, department, or facility





#### Manufacturing Process – Part 1:

- 1. Manufacturing Introduction
- 2. Ingredient Scaling
- 3. Mixing
- 4. Fermentation
- 5. Dough Systems: Sponge and Dough
- 6. Dough Systems: Liquid Fermentation
- 7. Dough Systems Straight Dough
- 8. Dough Systems: No Time Dough
- 9. Dough Systems: Continuous Mix
- 10. Dough Systems: Compare Dough Systems

#### Manufacturing Process – Part 2:

- 11. Dividing
- 12. Rounding
- 13. Intermediate Proof
- 14. Sheeting and Moulding
- 15. Panning
- 16. Proofing
- 17. Topping and Splitting
- 18. Baking
- 19. Depanning and Cooling
- 20. Packaging

#### **Production Categories: Bread**





## OVERVIEW

The lesson builds the knowledge of the function of ingredients from the benchtop and puts it to work on the production floor. This course focuses on the steps to manufacture pan bread, using a sponge and dough system, the most common dough system for white pan bread.

The course comprises scaling ingredients, mixing, and fermentation, covering information common for all dough systems and highlighting differences with other dough systems.

The course then branches into each dough system learning the mixing and fermentation specifics. The dough systems are listed from most to least commonly used for large-scale production. Additional learning objectives include liquid fermentation and continuous mix, which are simplified to illustrate the primary process.

#### COURSE OBJECTIVES:

In addition to specific content for each step, at the highest level upon completion of this course, you will be able to:

- 1. Explain the purpose of each step of the manufacturing process.
- 2. Describe dough and finished product characteristics of over-or under- performing each step in the manufacturing process.
- 3. Identify corrections for over-or under- performing each step in the manufacturing process.
- 4. Identify critical quality production controls for each step in the manufacturing process.
- 5. Identify common equipment used for each step in the manufacturing process.
- 6. Explain each unique step of each dough system.
- 7. Identify acceptable benchmark ranges for each dough system (unique ingredients, time, temperature, equipment, pH/TTA, etc.).
- 8. Explain common adjustments for each dough system.
- 9. Identify the advantages and disadvantages of each dough system.
- 10. Compare and contrast the dough systems.
- 11. Describe how dough temperature (and age) affects the manufacturing process.
- 12. Identify common adjustments to each manufacturing process step.

#### COURSE STRUCTURE/APPROACH:

1. The course is comprised of 20 modules. The course begins through an independent study by reading the syllabus and accessing both part one and part two of the educational lesson materials. Each interactive module has built-in knowledge checks to test your understanding throughout the course.

2. Each module has a final knowledge assessment to gauge your understanding of knowledge checks throughout the course. The resulting score does not count towards the final grade. This score gives students a sense of how they've grasped, applied, or otherwise made sense of the educational materials presented. By passing within the threshold score, students can accurately measure the effectiveness and impact of training and ability to pass the final test.

3. Following the educational materials, students must complete an exit survey and a final test. Students must take the final test with a GPA of 80% or higher within three (3) attempts to receive a graduation certificate. If you do not successfully pass the final test after three (3) attempts, you may contact our Education Department team (academy@ameicanbakers.org) for information on how to obtain an additional attempt. (Registration fees may apply.)

4. Plan to complete the lessons in order. Some activities will not be accessible until you have completed a required activity before it.