Department of College and Career Readiness

Culinary Science III
Curriculum

5.0 Credits

Unit Two
Culinary Science III

Course Description

Culinary Science III provides students enrichment and extension in two specific elements: cuisine and baking/pastry.

Baking & Pastry – This course provides learners with a comprehensive understanding of the ingredients, techniques, and procedures used in creating baked goods and pastries. Students progress through becoming proficient in the use of baking tools and equipment to utilizing baking ingredients to create cakes, pastries, breads and chocolate confections. Students also practice time management, acquire culinary math skills, and practice food safety and sanitation practices. Furthermore students will expand their knowledge of the fundamental skills in culinary and use those skills in conjunction with the basics they will be learning in the course to bring together the complete experience of working in a restaurant/commercial kitchen. Students will understand the concept of taste and how methods of cooking can affect color, flavor and textures. Menu implementation will play a bigger role and menu layout, marketing, concept development, product utilization, target customers and trends will be a part of this course.

Cuisine – Cuisine is a course in which students will expand their knowledge of the fundamental skills in culinary and use those skills in conjunction with the basics they will be learning in the course to bring together the complete experience of working in a restaurant/commercial kitchen. Students will understand the concept of taste and how methods of cooking can affect color, flavor and textures. Menu implementation will play a bigger role and menu layout, marketing, concept development, product utilization, target customers and trends will be a part of this course.
# Culinary Science III

## Pacing Guide

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topic</th>
<th>Suggested Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit 1</td>
<td>Baking &amp; Pastry: Introduction to Baking Techniques and Methods (Cakes and Yeast Doughs I) Pastries I and Chocolate Confections</td>
<td>approx. 9 weeks</td>
</tr>
<tr>
<td>Unit 2</td>
<td>Baking &amp; Pastry: Cakes and Pastries (Specialty Cakes and Advanced Pastries) &amp; Yeast Doughs II</td>
<td>approx. 9 weeks</td>
</tr>
<tr>
<td>Unit 3</td>
<td>Cuisine: Costing &amp; Cooking, Table Service &amp; Banquets</td>
<td>approx. 9 weeks</td>
</tr>
<tr>
<td>Unit 4</td>
<td>Cuisine: Developing Taste, Charcuterie &amp; Final Review</td>
<td>approx. 9 weeks</td>
</tr>
</tbody>
</table>
**Educational Technology Standards**

8.1.12.A.4, 8.1.5.C.1, 8.1.8.D.4, 8.1.8.E.1

<table>
<thead>
<tr>
<th>Technology Operations and Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Construct a spreadsheet workbook with multiple worksheets, rename tabs to reflect the data on the worksheet, and use mathematical or logical functions, charts and data from all worksheets to convey the results.</td>
</tr>
<tr>
<td>• <strong>Example of use within unit</strong>: Students will create a spreadsheet that will automatically calculate scale for a recipe and cost.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Creativity and Innovation</th>
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<tbody>
<tr>
<td>• Engage in online discussions with learners of other cultures to investigate a worldwide issue from multiple perspectives and sources, evaluate findings and present possible solutions, using digital tools and online resources for all steps.</td>
</tr>
<tr>
<td>• <strong>Example of use within unit</strong>: Students will communicate with students from other cultures to discuss issues such as food shortage etc.</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Digital Citizenship</th>
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<tbody>
<tr>
<td>• Assess the credibility and accuracy of digital content.</td>
</tr>
<tr>
<td>• <strong>Example of use within unit</strong>: Students will use digital credible resources to guide safe food handling</td>
</tr>
</tbody>
</table>

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<tr>
<th>Research and Information Fluency</th>
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<tbody>
<tr>
<td>• Effectively use a variety of search tools and filters in professional public databases to find information to solve a real world problem.</td>
</tr>
<tr>
<td>• <strong>Example of use within unit</strong>: Students use a variety of search tools and filters to find cost effective ways to feed large groups of people.</td>
</tr>
</tbody>
</table>
# Career Ready Practices

*Career Ready Practices* describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

<table>
<thead>
<tr>
<th>CRP6. Demonstrate creativity and innovation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.</td>
</tr>
<tr>
<td><strong>Example of use within unit:</strong> Develop an original recipes and or modifications to existing recipes to suit different dietary needs.</td>
</tr>
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<tr>
<th>CRP7. Employ valid and reliable research strategies.</th>
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<td>Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.</td>
</tr>
<tr>
<td><strong>Example of use within unit:</strong> Research the evolution of epicurean society, technology, and economy.</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>CRP11. Use technology to enhance productivity.</th>
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<td>Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.</td>
</tr>
</tbody>
</table>
Career Ready Practices

- **Example of use within unit:** Students will research the effect of new and different types of ovens on cook time, texture, and taste.

**CRP12. Work productively in teams while using cultural global competence.**
Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

  **Example of use within unit:** Student teams work together to create a menu that reflects the foods of a particular region.
**WIDA Proficiency Levels**: At the given level of English language proficiency, English language learners will process, understand, produce or use:

<table>
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<th>Level</th>
<th>Description</th>
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| **6- Reaching** | - Specialized or technical language reflective of the content areas at grade level  
- A variety of sentence lengths of varying linguistic complexity in extended oral or written discourse as required by the specified grade level  
- Oral or written communication in English comparable to proficient English peers |
| **5- Bridging** | - Specialized or technical language of the content areas  
- A variety of sentence lengths of varying linguistic complexity in extended oral or written discourse, including stories, essays or reports  
- Oral or written language approaching comparability to that of proficient English peers when presented with grade level material. |
| **4- Expanding** | - Specific and some technical language of the content areas  
- A variety of sentence lengths of varying linguistic complexity in oral discourse or multiple, related sentences or paragraphs  
- Oral or written language with minimal phonological, syntactic or semantic errors that may impede the communication, but retain much of its meaning, when presented with oral or written connected discourse, with sensory, graphic or interactive support |
| **3- Developing** | - General and some specific language of the content areas  
- Expanded sentences in oral interaction or written paragraphs  
- Oral or written language with phonological, syntactic or semantic errors that may impede the communication, but retain much of its meaning, when presented with oral or written, narrative or expository descriptions with sensory, graphic or interactive support |
| **2- Beginning** | - General language related to the content area  
- Phrases or short sentences  
- Oral or written language with phonological, syntactic, or semantic errors that often impede the communication when presented with one to multiple-step commands, directions, or a series of statements with sensory, graphic or interactive support |
| **1- Entering** | - Pictorial or graphic representation of the language of the content areas  
- Words, phrases or chunks of language when presented with one-step commands directions, WH-, choice or yes/no questions, or statements with sensory, graphic or interactive support |
# Language Development Supports For English Language Learners

## To Increase Comprehension and Communication Skills

### Environment

- Welcoming and stress-free
- Respectful of linguistic and cultural diversity
- Honors students’ background knowledge
- Sets clear and high expectations
- Includes routines and norms
- Is thinking-focused vs. answer-seeking
- Offers multiple modalities to engage in content learning and to demonstrate understanding
- Includes explicit instruction of specific language targets
- Provides participation techniques to include all learners

- Integrates learning centers and games in a meaningful way
- Provides opportunities to practice and refine receptive and productive skills in English as a new language
- Integrates meaning and purposeful tasks/activities that:
  - Are accessible by all students through multiple entry points
  - Are relevant to students’ lives and cultural experiences
  - Build on prior mathematical learning
  - Demonstrate high cognitive demand
  - Offer multiple strategies for solutions
  - Allow for a language learning experience in addition to content

### Sensory Supports*

- Real-life objects (realia) or concrete objects
- Physical models
- Manipulatives
- Pictures & photographs
- Visual representations or models such as diagrams or drawings
- Videos & films
- Newspapers or magazines
- Gestures
- Physical movements
- Music & songs

### Graphic Supports*

- Graphs
- Charts
- Timelines
- Number lines
- Graphic organizers
- Graphing paper

### Interactive Supports*

- In a whole group
- In a small group
- With a partner such as **Turn-and-Talk**
- In pairs as a group (first, two pairs work independently, then they form a group of four)
- In triads
- Cooperative learning structures such as **Think-Pair-Share**
- Interactive websites or software
- With a mentor or coach

### Verbal and Textual Supports

- Labeling
- Students’ native language
- Modeling
- Repetitions
- Paraphrasing
- Summarizing
- Guiding questions
- Clarifying questions
- Probing questions
- Leveled questions such as **What? When? Where? How? Why?**
- Questioning prompts & cues
- Word Banks
- Sentence starters
- Sentence frames
- Discussion frames
- Talk moves, including **Wait Time**

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BUILDING EQUITY IN YOUR TEACHING PRACTICE
How do the essential questions highlight the connection between the big ideas of the unit and equity in your teaching practice?

CONTENT INTEGRATION
Teachers use examples and content from a variety of cultures & groups.

This unit / lesson is connected to other topics explored with students.
There are multiple viewpoints reflected in the content of this unit / lesson.
The materials and resources are reflective of the diverse identities and experiences of students.
The content affirms students, as well as exposes them to experiences other than their own.

KNOWLEDGE CONSTRUCTION
Teachers help students understand how knowledge is created and influenced by cultural assumptions, perspectives & biases.

This unit / lesson provides context to the history of privilege and oppression.
This unit / lesson addresses power relationships.
This unit / lesson help students to develop research and critical thinking skills.
This curriculum creates windows and mirrors* for students.

PREJUDICE REDUCTION
Teachers implement lessons and activities to assert positive images of ethnic groups & improve intergroup relations.

This unit / lesson help students question and unpack biases & stereotypes.
This unit / lesson help students examine, research and question information and sources.
The curriculum encourage discussion and understanding about the groups of people being represented.
This unit / lesson challenges dominant perspectives.

EQUITABLE PEDAGOGY
Teachers modify techniques and methods to facilitate the academic achievement of students from diverse backgrounds.

The instruction has been modified to meet the needs of each student.
Students feel respected and their cultural identities are valued.
Additional supports have been provided for students to become successful and independent learners.
Opportunities are provided for student to reflect on their learning and provide feedback.

EMPOWERING SCHOOL CULTURE
Using the other four dimensions to create a safe and healthy educational environment for all.

There are opportunities for students to connect with the community.
My classroom is welcoming and supportive for all students?
I am aware of and sensitive to the needs of my students and their families.
There are effective parent communication systems established. Parents can talk to me about issues as they arise in my classroom.

*Window and mirror: A metaphor for how students can use their learning to see themselves and others in a new light.
# Culturally Relevant Pedagogy Examples

- **Relationships:**
  - Learn about your students’ individual cultures.
  - Adapt your teaching to the way your students learn.
  - Develop a connection with challenging students.
  - Communicate and work with parents/guardians on a regular basis (email distribution, newsletter, phone calls, notes, meetings, etc.).

- **Curriculum:**
  - Incorporate student-centered stories, vocabulary and examples.
  - Incorporate relatable aspects of students’ lives.
  - Create lessons that connect the content to your students’ culture and daily lives.
  - Incorporate instructional materials that relate to a variety of cultures.

- **Instructional Delivery:**
  - Establish an interactive dialogue to engage all students.
  - Continuously interact with students and provide frequent feedback.
  - Use frequent questioning as a means to keep students involved.
  - Intentionally address visual, tactile, and auditory learners.
  - Present relatable real world problems.
## Differentiated Instruction

### Strategies to Accommodate Students Based on Individual Needs

<table>
<thead>
<tr>
<th>Time/General</th>
<th>Processing</th>
<th>Comprehension</th>
<th>Recall</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Extra time for assigned tasks</td>
<td>- Extra Response time</td>
<td>- Precise step-by-step directions</td>
<td>- Teacher-made checklist</td>
</tr>
<tr>
<td>- Adjust length of assignment</td>
<td>- Have students verbalize steps</td>
<td>- Short manageable tasks</td>
<td>- Use visual graphic organizers</td>
</tr>
<tr>
<td>- Timeline with due dates for reports and projects</td>
<td>- Repeat, clarify or reword directions</td>
<td>- Brief and concrete directions</td>
<td>- Reference resources to promote independence</td>
</tr>
<tr>
<td>- Communication system between home and school</td>
<td>- Mini-breaks between tasks</td>
<td>- Provide immediate feedback</td>
<td>- Visual and verbal reminders</td>
</tr>
<tr>
<td>- Provide lecture notes/outline</td>
<td>- Provide a warning for transitions</td>
<td>- Small group instruction</td>
<td>- Graphic organizers</td>
</tr>
<tr>
<td>- Reading partners</td>
<td>- Reading partners</td>
<td>- Emphasize multi-sensory learning</td>
<td></td>
</tr>
</tbody>
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### Assistive Technology

- Computer/whiteboard
- Tape recorder
- Spell-checker
- Audio-taped books

### Tests/Quizzes/Grading

- Extended time
- Study guides
- Shortened tests
- Read directions aloud

### Behavior/Attention

- Consistent daily structured routine
- Simple and clear classroom rules
- Frequent feedback

### Organization

- Individual daily planner
- Display a written agenda
- Note-taking assistance
- Color code materials
## Differentiated Instruction

<table>
<thead>
<tr>
<th>Strategies to Accommodate Students Based on Content-Specific Needs</th>
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<tbody>
<tr>
<td>• Extra time for assigned tasks</td>
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<td>• Small group instruction</td>
</tr>
<tr>
<td>• Assistive Technology</td>
</tr>
<tr>
<td>• Translation Software</td>
</tr>
<tr>
<td>Enrichment</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Strategies Used to Accommodate Based on Students Individual Needs:</td>
</tr>
<tr>
<td>• Adaption of Material and Requirements</td>
</tr>
<tr>
<td>• Evaluate Vocabulary</td>
</tr>
<tr>
<td>• Elevated Text Complexity</td>
</tr>
<tr>
<td>• Additional Projects</td>
</tr>
<tr>
<td>• Independent Student Options</td>
</tr>
<tr>
<td>• Projects completed individual or with Partners</td>
</tr>
<tr>
<td>• Self Selection of Research</td>
</tr>
<tr>
<td>• Tiered/Multilevel Activities</td>
</tr>
<tr>
<td>• Guided Practice</td>
</tr>
<tr>
<td>• Independent Book and Magazine Studies</td>
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<tr>
<td>• Open-Ended Activities</td>
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</tbody>
</table>
## Assessments

### Suggested Formative/Summative Classroom Assessments

- Daily cooperative learning/performance assessments
- Daily assessment of proper cleanliness, organization, sanitation procedures and handling of tools and equipment
- Daily practical application assessments, Weekly Practical application assessments
- Charts, Graphic Organizers
- Research assignments
- Teacher-created Unit Assessments, Chapter Assessments, Quizzes
- Small Group and Individual Projects
- Teacher–created Essays, Short Answer
## Interdisciplinary Connections

**English Language Arts**
- Close reading of professional culinary related content. (NJSLSA.R1)
- Write professional level food review. (NJSLSA.W2)

**Math**
- Calculate how a restaurant makes money within the commercial industry. (N.Q.A.1)
- Use proportions to understand recipe scaling. (N.Q.A.2)

**Social Studies**
- Research the history of the restaurant industry. (6.1.12)
- Research the social impact and economic impact of the food industry. (6.3.12)

**World Language**
- Translate restaurant industry-content (7.1.ILA)
- Create a translated index of culinary industry vocabulary (7.1.ILA)

**Fine & Performing Arts**
- Compare graphics used in menus and food blogs. (1.2.12)
- Critique design food blogs. (1.4.12)

**Science**
- Research latest developments in the culinary industry technology (HS-ETS1-4)
- Investigate applicable-careers in STEM fields within the culinary industry. (9.2.12)
New Jersey Student Learning Standards

9.3– Career and Technical Education

Career Cluster: Hospitality & Tourism (HT)

- 9.3.HT.6 Describe career opportunities and means to attain those opportunities in each of the Hospitality & Tourism Career Pathways
- 9.3.HT-RFB.2 Demonstrate safety and sanitation procedures in food and beverage service facilities.
- 9.3.HT-RFB.4 Demonstrate leadership qualities and collaboration with others.
- 9.3.HT-RFB.7 Utilize technical resources for food services and beverage operations to update or enhance present practice.
- 9.3.HT-RFB.8 Implement standard operating procedures related to food and beverage production and guest service.
- 9.3.HT-RFB.9 Describe career opportunities and qualifications in the restaurant and food service industry.
- 9.3.HT-RFB.10 Apply listening, reading, writing and speaking skills to enhance operations and customer service in food and beverage service facilities.
- 9.3.HT-TT.2 Apply unit conversion skills to compute cost factors.

Key Ideas and Details:

- HSS.RL.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

Research to Build and Present Knowledge:

- HSS.W.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

16 | Page
• HSS. IC. B.3 Recognize the purposes of and differences among sample surveys, experiments and observational studies; explain how randomization relates to each.
**Course:** Culinary Science III  
**Unit:** 2 – Baking & Pastry: Specialty Cakes and Advanced Pastries, Yeast Dough II  
**Grade Level:** 9-12

**Unit Overview:** Students will extend their knowledge of American style cakes to include European style specialty cakes and advanced pastries. Students will create intricate and multi-faceted cakes with sophisticated embellishments and plated desserts with 3-4 separate components. They will also extend their knowledge of bread making to include advanced yeast and laminated doughs. Students will explore the process of creating American and European style breads utilizing starters and pre-ferments.

**New Jersey Student Learning Standards (NJSLS):** 9.3 HT-RFB.2, 9.3 HT-RFB.4, 9.3 HT-RFB.7, 9.3 HT-RFB.8, 9.3 HT-RFB.10, 9.3 HT TT.2, RL 11-12.1, W 11-12.7, HSS. IC. B.3

<table>
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<tr>
<th>Student Learning Objectives (SLOs)</th>
<th>Essential Questions</th>
<th>Skills &amp; Indicators</th>
<th>Sample Activities</th>
<th>Resources</th>
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</table>
| Create entremets and miroirs     | • What is an entremet?  
• What are miroirs?  
• What are Bavarians and Charlottes?  
• How are Bavarians and Charlottes created? | • Leveled cake layers  
• Smooth, shiny opaque miroir finishes  
• Cake layers completely encompassed in mousse  
• Even layers of mousse created | **Practical Application**  
**Practical Application**  
Create miroir glazed cakes  
Compose and apply multi-colored layers to a molded cake  
Utilize acetate as a medium for creating multi-colored layers  
Accurately read a candy thermometer  
Peer Pair to gather, | **Lessons 63 & 64 – Miroir, Charlotte | Dessert-o-licious**  
Cake Decorating, Module 4, The Institute of Culinary Education |
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| **Craft gum paste flowers**       | How is realism created with gum paste?  
- Flower buds properly adhered to stems  
- Petals thinly rolled and realistic  
- Veining applied to leaves and petals  
- Flower “throats” finished with petal dust. | **Practical Application**  
Create roses, calla lilies, Sweet pea and, magnolia flowers.  
Adhere flowers to tiered Cakes.  
Utilize petal dust to add realism to gum paste flowers  
[How to Make a Gum Paste Rose](https://www.CakePlayGround.com)  
[How to Make Easy Flower Blossoms in Gum](https://www.designmeacake.com) |
| **Create European**                | What are tortes, and how are they created?  
| | . Tortes properly scaled, mixed and assembled | **Practical Application**  
Practical Application  
Small Cooperative | [How to Make Easy Flower Blossoms in Gum](https://www.designmeacake.com) |
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| specialty cakes                   | What are plated desserts?  
What is presentation?  
What are the uses for edible gold paper? | • Timed execution of plated desserts that consist of 3-4 elements  
• Each element thoroughly completed and aesthetically arranged according to visual instructions. | groupings to create plated desserts  
Preparation of the following: sachertorte, dobos torte, tiramisu, various plated deserted with 3-4 components | paste  
www.designmeacake.com  
Specialty Gateaux, Cakes and Torten  
pp. 450-454: Gisselin, Wayne  
How to Make a Torte  
www.womensforum.com  
how-to-make-a-torte/html  
How to make Sachertorte  
www.newidea.com |
NJSLS: 9.3 HT-RFB.2, 9.3 HT-RFB.4, 9.3 HT-RFB.7, 9.3 HT-RFB .8, 9.3 HT-RFB .10, 9.3 HT-TT. 2, RL 11-12.1, W 11-12.7, HSS. IC. B.3 | How are tiers stacked?  
How are even layers created and filled?  
How are decorative embellishments applied? | • Cake tiers secured and balanced using dowels  
• Cake tiers evenly sliced  
• Cake tiers evenly measured. | Practical Application  
Peer- Pair to Execute the design for a specialty cake  
Utilize dowels to provide structure for cake tiers  
Measure and cut cake layers for evenness  
Icing and Assembling a Tiered Buttercream Cake:  
globalsugarart.com  
How to Make a Wedding |
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| Utilize marzipan as a medium to create decorative elements | • What is marzipan?  
• How is realism achieved when creating fruits & vegetables?  
• How can marzipan be used to create “lifelike” characters? | • Realism achieved in the creation of human characters.  
• Realism achieved in the creation of animals, fruits and vegetables.  
• Texture and tone achieved through the proper application of cornstarch. | **Practical Application**  
Utilize marzipan to create realistic representations of characters, animals, fruits and vegetables.  
Apply finished marzipan figures to embellish cakes  
Create marzipan using almond paste  
Applying texture and tone to create realism. | **Cake:** [www.gretchensbakery.com](http://www.gretchensbakery.com)  
**How to Make Tiered Cakes:** [www.makefabulouscake.com](http://www.makefabulouscake.com)  
**NJSLS:** 9.3 HT-RFB.2, 9.3 HT-RFB.4, 9.3 HT-RFB.7, 9.3 HT-RFB.8, 9.3 HT-RFB.10, 9.3 HT-TT.2, RL 11-12.1, W 11-12.7, HSS. IC. B.3  
**Decorating,** Garrett, Toba  
**How to Make Marzipan Figures:** [thecherryshare.com](http://thecherryshare.com)  
**How to Form Marzipan Animals:** [www.cakesuppliesplus.com](http://www.cakesuppliesplus.com) |
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| Finish specialty cakes using fondant | • How is fondant made?  
• How is fondant applied to a cake?  
• When should fondant be used?  
NJSLS: 9.3 HT-RFB.2, 9.3 HT-RFB.4, 9.3 HT-RFB.7, 9.3 HT-RFB .8, 9.3 HT-RFB .10, 9.3 HT-TT. 2, RL 11-12.1, W 11-12.7, HSS. IC. B.3 | • Color applied evenly to fondant  
• Measure, roll and cover cakes in fondant.  
• Smooth and trim fondant, once it has been applied to cakes. | Practical Applications  
Color fondant using gel/paste colors  
Heat fondant to a usable temperature  
Design a finished specialty cake for either a birthday, wedding or holiday. | Fondant Tools and Ingredients: www.makingthatcake.com  
How to Store and Prepare Fondant: www.cakebossbaking.com  
How to Use a Fondant Mold: www.wilton.com |
| Apply knowledge of working with yeast and fermentation, to create yeast dough. | • What factors assist/ inhibit the potency of yeast?  
• What changes occur place during the fermentation process?  
• How does the | • Consistency and Appearance of starter dough  
• Kneading Techniques  
• Dough Formation Methods | Monitoring and Feeding a “starter” dough  
Kneading dough  
Forming dough into a variety of shapes and sizes  
Utilizing baker’s percentages to | Bread and Other Yeast Raised Doughs, Module 2-Course 3, The Institute of Culinary Education  
Proofing Yeast and Kneading Dough www.virtuousbread.com  
Dan Lepard's |
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<td>Identify and Create classic bread shapes and doughs.</td>
<td>presence or absence of steam affect the ability of a dough to form a crust?</td>
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<td>increase/decrease quantities</td>
<td>Australian Baking Bible: bread video recipe</td>
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| **NJSLS:** 9.3 HT-RFB.2, 9.3 HT-RFB.4, 9.3 HT-RFB.7, 9.3 HT-RFB.8, 9.3 HT-RFB.10, 9.3 HT-TT.2, RL 11-12.1, W 11-12.7, HSS. IC. B.3 | ➢ What are the classic bread shapes?  
➢ What are the names and origins of classic bread shapes?  
➢ How do French shapes differ from Italian ones? | • Loaves and rolls properly formed  
• Baguettes, brioche, boule, ciabatta, bagels and bialys shaped.  
• Empanada and Purse Dumpling forms properly executed | **Practical Application**  
Guided Practice in shaping loaves, baguettes and boules  
Mini-lessons on kneading and turning dough.  
**Preparation of the following:** French and Italian loaves. | Basic Steps of Baking Bread | www.cia.com |
<p>|  |  |  |  | Shaping Bread Dough | <a href="http://www.udemy.com/rediscover">www.udemy.com/rediscover</a> |
|  |  |  |  | Bread dough-Shaping a boule | weekend_bakery.com |</p>
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| Create organic starters for bread | - What foods can be used to create a starter?  
   - How are starters perpetuated?  
   - Why is it important to perpetuate a starter? | - Comparison / Discussion of the effects of different foods on the growth of a starter  
   - Starters continue to thrive and grow by doubling in size  
   - Daily monitoring and recording of starters for growth | Practical Application  
Guided Practice in shaping loaves, baguettes and boules  
Mini-lessons on kneading and turning dough.  
Preparation of the following: French and Italian loaves. | How to Make Sourdough Starter from Scratch  
www.katiecooksandcrafts.com  
What, How & Why of a Sourdough Starter  
www.gnowfglins.com  
How to Make Sourdough Starter  
www.stellaculinary.com |
| Utilize advanced fermentation techniques | - What is a sponge?  
   - How are pre-ferments used?  
   - What are the common types of pre-ferments? | - Doughs doubled in size/volume  
   - Finished product is porous and off white in color  
   - Crust is even in color and texture with an open | Practical Application  
Folding over, Resting, and Dividing dough  
Pre-shaping/Shaping Bench-resting, Proofing and scoring of dough. | Basic Steps of Baking Bread  
www.cia.com  
Techniques for Baking Brad with Master Baker Lionel Vatinet  
www.LaFarmBakery.com |
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<tr>
<td>Utilize authentic bread bakers tools to create lean doughs&lt;br&gt;&lt;br&gt;&lt;b&gt;NJSLs:&lt;/b&gt; 9.3 HT-RFB.2, 9.3 HT-RFB.4, 9.3 HT-RFB.7, 9.3 HT-RFB.8, 9.3 HT-RFB.10, 9.3 HT-TT.2, RL 11-12.1, W 11-12.7, HSS. IC. B.3</td>
<td>➢ What tools are used to create breads?&lt;br&gt;➢ What is a couche, lame, baton and how is each one used?&lt;br&gt;➢ What are the proper methods for storing and cleaning bread making tools?&lt;br&gt;➢ What is the “straight dough” mixing method?”</td>
<td>crumb section&lt;br&gt;➢ Interior is light and airy</td>
<td>Evaluation/discussion of finished products for the following interior and exterior qualities: shape, color, crust, slice, aroma, crumb taste and total impression of finished&lt;br&gt;Practical Application&lt;br&gt;Mini-Lessons on kneading and folding over dough&lt;br&gt;Preparation of the following:&lt;br&gt;Pizza dough, baguettes, dinner rolls</td>
<td>Cultivate Your Own Wild Yeast Starter&lt;br&gt;www.thekingsroost.com&lt;br&gt;Bakery Work&lt;br&gt;VincentTalleu.co&lt;br&gt;Bread Baking Technique&lt;br&gt;www.kvalifood.com&lt;br&gt;Basic Steps of Baking Bread&lt;br&gt;www.cia.com</td>
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| **Laminate dough**               | - What are the 3 stages of mixing dough?  
                                 | - What is meant by the term “laminated?”  
                                 | - What is meant by the term “turn?”  
                                 | - What is an envelope/book turn?  
                                 | - What are the detrempe, beurrage, and paton?  
                                 | - Even distribution of butter throughout the surface of the dough  
                                 | - Dough is soft and pliable  
                                 | - Several layers incorporated into dough, as a result each turn  
                                 | - Detrempe, beurrage, and paton executed successfully  
                                 | Create various decorative shapes and symmetry using a variety of doughs.  
                                 | Accurately scale and measure length and width of dough to ensure portioning is consistent.  
                                 | Prepare laminated doughs: croissants, danish dough, puff pastry and brioche.  
                                 | **Brioche**  
                                 | **marksinclair.com**  
                                 | **Danish Pastries/Bake with Anna Olson**  
                                 | **www.ohyumwithannaolson.com**  
                                 | **Puff Pastry**  
                                 | **www.aashpazi.com/zabandoned.puffpastry** |
| **Calculate baker’s percentages** | - How are baker’s percentages calculated?  
                                 | - How is the weight of flour determined?  
                                 | - Calculating baker’s percentages to create smaller or larger quantities of a given recipe  
                                 | **Practical Application:** Complete several mathematical exercises that determine baker’s percentages.  
                                 | **Basic Steps of Baking Bread:**  
                                 | **www.cia.com**  
<pre><code>                             | **What is the Baker’s** |
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<td>TT. 2, RL 11-12.1, W 11-12.7, HSS. IC. B.3</td>
<td>➢ How is the weight of all other ingredients calculated?</td>
<td>• Determining the weight of various ingredients in a recipe  • Adjusting the weight of various ingredients in a recipe to create smaller or larger quantities</td>
<td>Complete several mathematical exercises that calculate the weight of all ingredients.  Prepare yeast and leavened breads.  Peer pair to create bread recipes and formulas</td>
<td>Percentage: <a href="http://www.stellaculinary.com">www.stellaculinary.com</a>  BakingMath Part 2 <a href="http://www.thefreshloaf.com">www.thefreshloaf.com</a></td>
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**Suggested Unit Projects**

*Choose At Least One*

| Peer-Pair to design and execute a 2-tiered Specialty Cake | Research the origin of a European style pastry, and write a brief description. |

**Certification Exams**

| ServSafe: Food Handler | TIPS (Training for Alcohol Intervention Procedures) |

**Suggested Structured Learning Experiences**

| Culinary Institute of America  
1946 Campus Drive  
Hyde Park, NY 12538 | IHOP  
301 Main Street #180  
Paterson, NJ 07505 |
| Community Food Bank of New Jersey  
31 Evans Terminal Rd,  
Hillside, NJ 07205 | Passaic County Community College  
1 College Boulevard  
Paterson, NJ 07505 |