



Republic of Rwanda
Ministry of Education



RTB | RWANDA
TVET BOARD

RQF LEVEL 5



FOOD AND BEVERAGE OPERATIONS

FBOCC501

Specialty Coffee and Cocktails Preparation

TRAINEE'S MANUAL

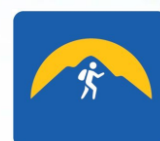
April 2025



Republic of Rwanda
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PREPARE SPECIALITY COFFEE AND COCKTAILS



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LIST OF ABBREVIATIONS AND ACRONYMS

°C:	Degrees Celsius
°F:	Degrees Fahrenheit
CBET:	Competence Base Education and Training
g:	Grams
HACCP:	Hazard Analysis and Critical Control Points
Lbs:	Pounds
mL:	Milliliters
Oz:	Ounces
Psi:	Pounds per Square Inch
MCQs:	Multiple Choice Questions
RQF:	Rwanda Qualification Framework
RTB:	Rwanda TVET Board
SOPs:	Standard Operating Procedures
TVET:	Technical and Vocational Education and Training
VIP:	Very Important Person

INTRODUCTION

This trainee's manual encompasses all necessary skills, knowledge and attitudes required to **Prepare specialty coffee and cocktails**. Students undertaking this module shall be exposed to practical activities that will develop and nurture their competencies. The writing process of this training manual embraced competency-based education and training (CBET) philosophy by providing practical opportunities reflecting real-life situations.

The trainee's manual is subdivided into units, each unit has got various topics. You will start with a self-assessment exercise to help you rate yourself on the level of skills, knowledge, and attitudes about the unit.

A discovery activity is followed to help you discover what you already know about the unit.

After these activities, you will learn more about the topics by doing different activities by reading the required knowledge, techniques, steps, procedures and other requirements under the key facts section, you may also get assistance from the trainer. The activities in this training manual are prepared such that they give opportunities to students to work individually and in groups.

After going through all activities, you shall undertake progressive assessments known as formative and finally conclude with your self-reflection to identify your strengths, weaknesses and areas for improvement.

Do not forget to read the point to remember the section which provides the overall key points and takeaways of the unit.

Module Units:

Unit 1: Perform pre-coffee and cocktail preparation activities

Unit 2: Make espresso derivative coffee

Unit 3: Make advanced cocktails

UNIT 1: PERFORM PRE-COFFEE AND COCKTAIL PREPARATION ACTIVITIES



Unit summary

This unit provides you with the knowledge, skills, and attitudes required to apply personal grooming and personal hygiene practices, clean workplace, and select materials, tools, and equipment for performing pre-preparation activities for coffee and cocktail preparation

Self-Assessment: Unit 1

- Referring to the unit illustrations above discuss the following:
 - What do the illustrations show
 - What do you think this unit is about based on the illustrations
- Complete the self-assessment table below to assess your level of knowledge, skills, and attitudes under this unit.
 - There is no right or wrong way to answer this assessment. It is for your reference and self-reflection on the knowledge, skills, and attitudes acquired during the learning process.
 - Think about yourself: do you think you have the knowledge, skills, or attitudes to do the task? How well?
 - Read the statements and check on a column that best represents your level of knowledge, skills, and attitudes.
 - At the end of this unit, you will assess yourself again.

My experience	I do not	I know	I have some	I have a lot	I am
Knowledge, skills, and attitudes	have any experience doing this.	a little about this.	experience doing this.	of experience with this.	confident in my ability to do this.
Identify barista dressing code at the workplace					
Identify Bartender's dressing code at the workplace					
Apply oral, and hand hygiene					
Apply personal hygiene practices					

My experience	I do not	I know	I have some	I have a lot	I am
Knowledge, skills, and attitudes	have any experience doing this.	a little about this.	experience doing this.	of experience with this.	confident in my ability to do this.
Apply Hair and nail care for personal hygiene practices					
Apply Cleaning HACCP guidelines for Bar and coffee shop					
Apply cleaning methods for bar and coffee shop.					
Select materials for espresso coffee-making					
Select tools and equipment for espresso coffee making					
Select materials for special cocktails preparation					
Select tools and equipment for special cocktails					



Key Competencies:

Knowledge	Skills	Attitudes
1. Identify Safety precautions requirements	1. Apply Creativity skills	1. Being honest
2. Describe Cleaning technical	2. Apply Proper use of measurement tools	2. Being warmth
3. Select the Personal hygiene standards	3. Apply coffee and cocktail Machine operation	3. Being friendly
4. Select the Industrial SOPs	4. Apply Communication skills	4. Being accountability
5. Describe the Basic calculation	5. Apply Collaborative skills	5. Being self-motivated
6. Describe Hygiene knowledge	6. Apply recipes coffee and cocktail preparation skills	6. Being creative and innovate
7. Select materials based on recipes	7. Apply Requesting skills	7. Demonstrate professionalism
8. Describe the Critical thinking knowledge	8. Demonstrate time management skills	8. Being Safety Consciousness
	9. Apply Safety precautions	



Discovery activity:



Task 1:

1. Based on your experience in pre-coffee and cocktail preparation activities read and answer reply to the following questions:
 - a. List the personal grooming for professional baristas and bartenders
 - b. Describe the dressing code for professional baristas and bartenders
 - c. Explain the HACCP guidelines for cleaning Bar and coffee shop
 - d. Describe the material for coffee and cocktail preparation
 - e. Describe the tool for coffee and cocktail preparation
 - f. Describe the equipment for coffee and cocktail preparation

Topic 1.1: Application of personal grooming and hygiene practices for baristas and bartenders.



Activity 1: Problem Solving



Task 2:

Application of Personal Grooming and Hygiene Practices for Baristas and Bartenders

Scenario

At "Brew & Cheers Café," a popular coffee shop and bar, the management noticed a decline in customer satisfaction. Some customers complained about a barista serving coffee with untidy nails, and a bartender with noticeable body odor while mixing drinks. These issues led to concerns about hygiene and professionalism, resulting in negative online reviews. You are tasked by the management to address these issues by reinforcing personal grooming and hygiene practices among the staff through the following steps:

Instruction: Select the letter (s) corresponding to your findings at each step required to address the aforementioned issues.

1. Identify the Problem:

- a. Customer complaints about the barista's unclean nails.
- b. The bartender's body odor creates discomfort for guests.
- c. Negative impact on the café's reputation.

2. Root Cause Analysis:

- a. Lack of strict personal grooming policies.
- b. Insufficient training on hygiene and its importance in customer service.
- c. Inadequate facilities or resources for maintaining hygiene (e.g., lack of hand-washing stations, absence of deodorants or grooming kits).

3. Set Goals:

- a. Ensure all staff adhere to strict grooming and hygiene standards.
- b. Improve customer perceptions and satisfaction.
- c. Establish an environment that prioritizes cleanliness and professionalism.

4. Implement Solutions:

A. Introduce a Grooming Policy:

- a. Clearly define expectations, including clean nails, fresh uniforms, tied-back hair, and use of deodorant.
- b. Specify guidelines for makeup, beard maintenance, and accessories to maintain a professional appearance.

B. Provide Hygiene Training:

- a. Conduct a workshop for all staff highlighting the importance of personal grooming.
- b. Include practical demonstrations of proper handwashing, nail care, and the use of personal hygiene products.

C. Offer Resources:

- a. Provide grooming kits at the workplace (nail clippers, combs, deodorants).
- b. Install accessible hand-washing stations with soap and hand sanitizers.

D. Conduct Regular Inspections:

- a. Supervisors to perform daily checks on staff grooming.
- b. Include personal hygiene as part of the performance appraisal criteria.

E. Gather Feedback:

- a. Use anonymous customer surveys to assess improvements in hygiene perceptions.
- b. Encourage open communication among staff to identify additional needs or challenges.

Key Facts 1.1 Personal grooming and hygiene¹

Personal Grooming and Hygiene

- **Hair Care:**

- ✓ Hair should be clean, neat, and styled in a way that is professional and safe (especially for baristas and bartenders who work with hot equipment or beverages).
- ✓ Long hair should be tied back or tucked away to prevent it from interfering with work or coming into contact with food and drinks.

¹ Wrobel, M. J. (2020). Why Good Hygiene and Grooming? In *A Spectrum of Solutions for Clients with Autism* (pp. 244-252). Routledge

- ✓ Avoid excessive hair products that can cause an oily appearance or strong odors.

- **Nail Care:**

- ✓ Nails should be clean, trimmed, and free from polish chips to maintain a professional appearance.
- ✓ Artificial nails should be avoided or kept short to prevent them from interfering with tasks or causing contamination.
- ✓ Regular hand care is essential, especially for those handling food and drinks.

- **Oral Hygiene:**

- ✓ Brushing teeth twice a day and using mouthwash to ensure fresh breath is important, as interactions with customers are frequent.
- ✓ Avoid strong-smelling foods (like garlic) before shifts to maintain fresh breath.
- ✓ Good dental hygiene promotes overall health and contributes to a professional appearance.

- **Respiratory Hygiene:**

- ✓ Covering mouth and nose when coughing or sneezing, preferably with a tissue or into the elbow, is essential to prevent the spread of germs.
- ✓ Ensure that tissues and masks (if required) are readily available, especially in food or beverage service environments.
- ✓ Regularly washing hands after sneezing or coughing is a must.

- **Handwashing:**

- ✓ Hands should be washed frequently, especially after handling raw ingredients, waste, or using the restroom.
- ✓ Use hand soap and running water, scrubbing for at least 20 seconds, and dry hands with a clean towel or air dryer.
- ✓ Using hand sanitizers when soap and water are not available is also an essential practice.

- **Bathing:**

- ✓ Regular bathing is necessary to maintain personal cleanliness and prevent body odors, which is particularly important in close-contact environments like bars or cafes.
- ✓ Showering daily or as needed depending on the work environment helps employees feel fresh and presentable.

Dressing Code

- **Barista:**



- ✓ **Uniforms:** Typically, baristas wear uniforms, such as branded aprons or shirts, to ensure a professional and clean look. Aprons protect clothing and are functional for carrying tools and equipment.
- ✓ **Footwear:** Comfortable, slip-resistant shoes are essential for safety and long hours on the floor. Closed-toe shoes are often required for health and safety reasons.
- ✓ **Hygiene Focus:** Clothing should be clean, free from stains, and smell fresh. Hair should be tied back to maintain a clean and professional appearance.
- ✓ **Accessories:** Avoid excessive jewelry or accessories that can be distracting or get in the way when preparing drinks.

- **Bartender:**



- ✓ **Uniforms:** Bartenders often wear uniforms that may include a branded shirt, vest, or apron. The attire should be functional and formal enough to fit the establishment's atmosphere.

- ✓ **Footwear:** Like baristas, bartenders need to wear comfortable, non-slip shoes as they work on their feet for long hours and handle breakable glassware.

- ✓ **Hygiene Focus:** Similar to baristas, bartenders should maintain clean, pressed, and stain-free uniforms. Personal hygiene is crucial as they interact with customers closely.

- ✓ **Accessories:** Bartenders should keep accessories minimal. They may wear a small amount of jewelry but should avoid anything that can interfere with drink preparation or service.

General Dress Code Tips for Both:

- ✓ **Cleanliness:** Always maintain a clean and fresh appearance, as first impressions are vital in customer-facing roles.

- ✓ **Comfort:** While appearance matters, comfort is also essential for long shifts. Proper-fitting clothing and footwear will contribute to performance and well-being.

- ✓ **Professionalism:** Employees should dress in a manner that reflects the brand or establishment's image, balancing personal style with professionalism.



Activity 2: Guided Practice



Task 3:

Scenario

You are working as a guest service associate at a luxury hotel. As part of your role, you are expected to maintain high standards of personal grooming and hygiene. One of your responsibilities is to greet guests in the lobby and assist them with their needs. Today, you're preparing for the afternoon shift, and your appearance must reflect the hotel's standards of professionalism and cleanliness.

Questions for Reflection:

1. Why is maintaining personal grooming and hygiene important for someone working in the hospitality industry?
2. How do personal grooming standards reflect on the professionalism and quality of the hotel's service?
3. What are the consequences of neglecting personal hygiene in a guest-facing role?
4. Describe a situation where poor personal grooming or hygiene could negatively impact the guest experience. How would you handle such a situation?
5. What steps would you take to ensure your grooming habits are consistent and aligned with hotel policies throughout a long workday?



Activity 3: Application



Task 4:

Application activities on personal grooming and hygiene.

Scenario:

It's the morning shift at a busy 5-star hotel. The hotel is expecting several VIP guests for a conference. You must ensure that new employees, including receptionists, housekeepers, and food & beverage staff, have just completed their personal grooming and hygiene training.

1. List five personal hygiene practices that everyone should follow daily.
2. Design a daily personal grooming routine for someone in a hotel.
3. Explain why personal grooming and hygiene are essential in customer-facing professions like hospitality.
4. Perform a hand-washing demonstration, explaining each step to ensure thorough cleaning.

Topic 1.2: Cleaning Workplace



Activity 1: Problem Solving



Task 5:

Scenario on cleaning workplace

You are the supervisor of a restaurant. One of your team members, Alex, has been assigned to clean the dining area after closing. However, customers complained the next day about sticky tables, leftover crumbs on the floor, and an unpleasant smell.

Question:

1. Identify possible reasons why the cleaning was not done properly.
2. What steps would you take to resolve this issue and ensure it doesn't happen again?
3. Explain the cleaning methods for the bar after service.
4. What are the bar HACCP guidelines of,
 - a. Beverage temperature control
 - b. Sanitation and hygiene practical
 - c. Cross-contamination
5. What are the coffee shop HACCP guidelines of,
 - a. Safe Handling of Ingredients
 - b. Equipment Maintenance and Cleaning
 - c. Temperature Control for Prepared Beverages

Key Facts 1.2: Cleaning Workplace²

- **Bar HACCP Guidelines**

- ✓ **Temperature Control for Perishable Items:**



Key Fact: Proper temperature control is essential to prevent the growth of harmful bacteria. Perishable items like juices, dairy, syrups, and fresh fruits should be stored below 5°C (41°F) and used within recommended timeframes.

² Van Kampen, V., Hoffmeyer, F., Seifert, C., Brüning, T., & Bünger, J. (2020). Occupational health hazards of street cleaners—a literature review considering prevention practices at the workplace. *International Journal of Occupational Medicine and Environmental Health*, 33(6), 701-732.

✚ **Action:** Monitor and log fridge and freezer temperatures, ensuring they are maintained at safe levels.

✓ **Sanitation and Hygiene Practices:**

✚ **Key Fact:** Bar areas should be regularly cleaned and sanitized to prevent cross-contamination and the spread of pathogens.

✚ **Action:** Clean surfaces and utensils after each use, wash hands frequently, and use separate equipment for different tasks to maintain hygiene.

✓ **Preventing Contamination in Beverages:**

✚ **Key Fact:** Contamination can occur from direct contact with unclean hands, equipment, or surfaces, as well as from improper storage of ingredients.

✚ **Action:** Use clean glassware, properly store garnishes and ingredients, and avoid touching the inside of glasses or cups.

• **Coffee Shop HACCP Guidelines**

✓ **Safe Handling of Ingredients:**

✚ **Key Fact:** Ensure safe storage, handling, and preparation of coffee beans, milk, syrups, and pastries to prevent contamination and spoilage.

✚ **Action:** Store coffee beans in a cool, dry place, keep milk refrigerated, and avoid cross-contamination by using separate utensils for different ingredients.

✓ **Equipment Maintenance and Cleaning:**

✚ **Key Fact:** Regular cleaning and maintenance of coffee machines, grinders, and other equipment help maintain quality and prevent the buildup of harmful bacteria.

✚ **Action:** Clean espresso machines and grinders daily, sanitize milk frothers, and service equipment regularly to ensure optimal performance.

✓ **Temperature Control for Prepared Beverages:**

✚ **Key Fact:** Coffee should be served at the correct temperature (generally 60-70°C or 140-158°F), and milk should not be heated above 70°C (158°F) to prevent scalding and maintain flavor.

✚ **Action:** Use thermometers to monitor beverage temperatures and ensure drinks are served at safe and optimal temperatures.

• **Cleaning Methods for Bar and Coffee Shop**

✓ **Daily Cleaning Method:**

✚ **Key Fact:** Daily cleaning ensures a hygienic environment and prevents the buildup of dirt, grease, and bacteria.

✚ **Action:** Clean all work surfaces, utensils, glassware, and floors daily. Use appropriate cleaning agents and sanitizers for high-touch areas like countertops and taps. Ensure all spills are wiped up immediately.

✓ **Deep Cleaning Method:**

✚ **Key Fact:** Deep cleaning is necessary to maintain equipment and surfaces in top condition and to remove dirt and grime that accumulate over time.

✚ **Action:** Perform deep cleaning on equipment, including espresso machines, grinders, refrigerators, and storage areas, at least once a week. This includes descaling machines, cleaning vents, and thoroughly scrubbing floors and walls.

✓ **Spot Cleaning Method:**

✚ **Key Fact:** Spot cleaning involves quickly addressing spills or stains as they happen to maintain cleanliness throughout the day.

✚ **Action:** Immediately clean up spills, stains, or messes to prevent buildup. This includes wiping down countertops, chairs, and floors where liquids or food may have spilled.



Activity 2: Guided Practice



Task 6:

Guided Practice on Cleaning a Workplace

Sarah is a new employee at Spark Clean Ltd, a company specializing in office cleaning services. On her first day, she is assigned to clean a medium-sized office space. Her supervisor, James, provides guided practice to ensure she understands and follows proper cleaning protocols.

James starts by demonstrating each step, explaining why it's essential to maintain cleanliness and safety. He emphasizes attention to detail, proper handling of cleaning materials, and compliance with workplace hygiene standards.

The cleaning process includes:

- ✓ Dusting and wiping down surfaces such as desks, shelves, and computer screens.
- ✓ Vacuuming carpets and mopping tiled floors.
- ✓ Cleaning windows and glass partitions using a microfiber cloth and glass cleaner.
- ✓ Emptying trash bins and replacing liners.
- ✓ Sanitizing high-touch areas like doorknobs, light switches, and telephones.

Sarah observes James and asks questions to clarify her doubts. After the demonstration, James guides Sarah as she practices the tasks. He provides constructive feedback and encourages her to work independently but under observation.

At the end of the session, Sarah completes the cleaning successfully, and James praises her efforts, highlighting areas where she excelled and suggesting improvements for the next time.

Questions

1. What is the purpose of guided practice in workplace cleaning, and how does it benefit new employees like Sarah?
2. Why is it essential to sanitize high-touch areas, and what risks might arise if this step is neglected?
3. Identify two critical points of feedback that James might have given Sarah to improve her cleaning performance.
4. Explain how following proper cleaning protocols can contribute to workplace safety and hygiene.
5. If Sarah encounters a stubborn stain on the carpet, what steps should she take to address it without damaging the material?



Activity 3: Application



Task 7:

Cleaning a Workplace.

Scenario:

Imagine you are a team member responsible for ensuring cleanliness in a professional workplace (e.g., office, hotel, or restaurant). Your task is to plan and execute a cleaning schedule that meets workplace hygiene standards. To accomplish your responsibilities, you are requested to:

1. Write a brief report on the process, including the challenges faced and how they were addressed.
2. Discuss with the group:
 - a. Why is maintaining a clean workplace essential?
 - b. How does a clean workplace contribute to productivity and employee well-being?
 - c. What strategies can be implemented to sustain cleanliness?

Topic 1.3: Selection of material, tools, and equipment for coffee and cocktails.



Activity 1: Problem-solving

Scenario: Selection of Materials, Tools, and Equipment for Coffee and Cocktails.

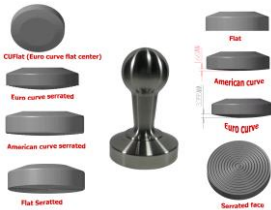
You are a barista and bartender at a high-end hotel, and you've been tasked to ensure that the materials, tools, and equipment used for making coffee and cocktails meet both quality and efficiency standards. You need to choose the right tools for the job while considering guest preferences, speed of service, and safety.

Problem:

Given the following situations, choose the most appropriate tools and equipment needed to make the perfect coffee or cocktail by answering to the following questions:

1. What are the most important tools used to prepare a classic espresso for a guest who prefers a strong, rich coffee.
2. A guest orders a cocktail that requires muddling fresh mint leaves and lime slices for a Mojito. Name the tools you would use.
3. You need to prepare a cappuccino for a guest who enjoys a foamy, creamy texture. Which tool(s) should you use to achieve the perfect milk foam?
4. When preparing a cocktail with multiple layers, such as a Tequila Sunrise, which tool would be best for ensuring the ingredients are poured gently and maintain their layers?
5. You need to serve a large group of guests with iced coffee drinks. What are the tools would be most effective in quickly and efficiently preparing multiple iced coffees?

Key Facts 1.3: The Selection of Materials, tools, and equipment for Coffee and Cocktails.³

Equipment /Tools	Image	Uses
Espresso Machine		The core tool for brewing espresso; it uses pressurized water to extract flavor from finely ground coffee
Grinder		A burr grinder ensures a consistent grind size, essential for espresso extraction.
Tamper		Used to evenly compress ground coffee into the portafilter for consistent shot quality.
Milk Frothier/Steamer		For frothing milk to create textures like those used in lattes, cappuccinos, and macchiatos.

³ SANDUA, D. (2024). *THE ART OF COFFEE: TECHNIQUES AND VARIETIES FOR THE DISCERNING BARISTA*. David Sandua.

Portafilter		Holds the ground coffee and allows water to flow through it during extraction.
Steam Wand		Used for frothing milk and adding macrofoam to espresso-based drinks.
High-Quality Coffee Beans		Fresh, specialty coffee beans are key to creating a great espresso shot.
Fresh Milk or Milk Alternatives		Whole milk is commonly used, but alternatives like oat or almond milk are popular for non-dairy drinks.
Syrups and Flavors		Caramel, vanilla, hazelnut, and chocolate syrups are used to add flavor to espresso drinks.
Whipped Cream		Often used as a topping for drinks like mochas or flavored lattes.

Cocktail Shaker		Essential for mixing ingredients with ice, creating a smooth, chilled drink.
Jigger		Used for accurately measuring spirits, mixers, and ingredients.
Muddler		A tool for crushing ingredients (e.g., mint, fruits) to release flavors.
Strainer		Used to filter ice and solid ingredients from the cocktail before serving.
Fruits Blender		For making frozen cocktails like margaritas or daiquiris.
Glassware		Specific glasses (e.g., martini glasses, highball glasses) are used depending on the cocktail.

Ice Bucket & Tongs		For storing and serving ice efficiently.
Spirits and Liquors		Base spirits such as rum, vodka, whiskey, gin, and tequila are essential.
Mixers		Juices, soda, tonic water, or syrups that complement spirits.
Bitters		Adds aromatic complexity to cocktails like Old Fashioneds.

Garnishes		Fresh fruits, herbs (like mint), and cocktail picks elevate the presentation.
Latte Art Tools		Stencils and milk frothing pitchers help create artistic patterns with steamed milk.
Flavored Powders and Syrups		Cocoa powder, cinnamon, or chocolate syrup are sprinkled or drizzled for extra flair.
Edible Flowers		Used for decoration, especially for visually appealing lattes or flavored coffees.
Chocolate Shavings		Adds texture and taste to specialty coffee drinks like mochas.

Fruit Garnishes		Citrus twists, wedges, or whole fruits are used to decorate cocktails like margaritas or mojitos.
Herbs		Mint sprigs, basil, or rosemary can be added to enhance aroma and flavor
Cocktail Picks		Skewers holding fruits or olives make the presentation more elegant.
Rimming Glasses		Coating the glass rim with sugar, salt, or spices adds a touch of class to cocktails like margaritas.



Activity 2: Guided Practice



Task 9:

Scenario:

You are managing a hotel bar and café, and you are tasked with selecting the appropriate materials, tools, and equipment for preparing a range of coffee drinks and cocktails to ensure high-quality service for guests. Consider factors like efficiency, quality, and guest satisfaction.

Question:

1. Coffee Preparation:

- a. What types of coffee beans would you select for preparing espresso-based drinks? Explain why.
- b. Identify three key tools required for brewing coffee and discuss the role of each tool in ensuring consistent quality.

2. Cocktail Preparation:

- a. What type of glassware would be best suited for serving cocktails like martinis, margaritas, and highballs? Justify your choices based on the type of cocktail and guest experience.
- b. Choose three essential tools for cocktail preparation and explain how each contributes to the precision and creativity of cocktail making.



Activity 3: Application



Task 10:

Scenario:

You are a bartender at a high-end hotel, preparing to serve a mixed group of guests. Some prefer coffee beverages, while others want cocktails. Your goal is to ensure the best experience by selecting the right materials, tools, and equipment for each preparation.

For the coffee service, a guest requests a cappuccino and an espresso, while for the cocktail service, another guest asks for a classic mojito and an espresso martini. You have access to an espresso machine, a frothing wand, a shaker, a muddler, jiggers, fresh mint, sugar, lime, vodka, coffee liqueur, and other common ingredients.

Coffee tools & Equipment Selection

1. Choose the right equipment for various coffee brewing techniques (e.g., espresso machine, French press, pour-over, drip coffee maker).
2. For each method, explain the function of the equipment (e.g., how a grinder affects the taste of espresso).
3. Select materials for filters and cups that would best suit the brewing method and provide an optimal tasting experience.

Cocktail Tools & Equipment Selection

1. Choose tools needed for shaking, stirring, muddling, and straining (e.g., shaker, muddler, bar spoon, jigger, strainer).
2. Select glassware for specific cocktails (e.g., martini glasses for martinis, highball glasses for mixed drinks).
3. Choose the right garnishes and utensils for presentation (e.g., citrus peel for garnishing, swizzle sticks).

Coffee & Cocktail Ingredient Sourcing

1. For a given coffee recipe, choose the appropriate coffee beans, water temperature, milk type, and sweeteners.
2. For a cocktail recipe, choose the right spirits, mixers, garnishes, and ice types (e.g., cracked ice for shaken drinks, cubed ice for stirred cocktails).
3. Consider local and seasonal availability when making ingredient selections.

Coffee or cocktail recipe Adjustment Based on Equipment

1. Given a standard recipe, identify alternatives if certain equipment is unavailable (e.g., using a French press instead of an espresso machine).
2. Modify the recipe to ensure the result remains of high quality (e.g., adjusting brewing times or proportions based on the tool used).
3. Consider equipment limitations, such as the number of servings or the type of cup available.

Practical Coffee & Cocktail Preparation

1. Prepare a coffee and a cocktail from provided recipes, using the correct equipment and ingredients.
2. Ensure that each step (e.g., grinding, brewing, shaking, stirring) is carried out properly, with attention to detail on the tool or equipment used.
3. Present the final product with the appropriate garnish and glassware.

Troubleshooting Equipment and Ingredients

1. Simulate problems that could occur with equipment or ingredients (e.g., over-brewed coffee due to wrong grind size, poor cocktail balance due to inaccurate measurements).
2. Identify the root cause of the issue and adjust the preparation process to solve the problem.
3. Record the changes made and assess their impact on the final product.



Formative Assessment

Section 1: Multiple Choice Questions (MCQs): Choose the letter corresponding to the correct answer.

Section 1: Multiple Choice Questions (MCQs)

1. Which of the following is the first step in preparing for coffee service?
 - a. Grinding the coffee beans
 - b. Preparing the serving cups
 - c. Checking the coffee machine functionality
 - d. Steaming milk
2. When preparing a cocktail, what is the primary purpose of "mise en place"?
 - a. To ensure all ingredients are available and measured
 - b. To decorate the glasses
 - c. To blend the cocktail flavors
 - d. To clean the bar station
3. What should you check before starting to make coffee with an espresso machine?
 - a. The temperature of the milk
 - b. The water reservoir is full
 - c. The serving size of the coffee
 - d. The coffee grinder is cleaned
4. What is the most common tool used for measuring liquids in cocktail preparation?
 - a. Bar spoon
 - b. Jigger
 - c. Cocktail shaker
 - d. Muddler

Section 2: True/False Questions: Answer by True if the statement is correct and False if the statement is false.

1. A clean and organized workspace is essential for ensuring that both coffee and cocktail preparation is efficient and hygienic. (True/False)
2. Coffee beans should be ground just before brewing for optimal freshness and flavor. (True/False)
3. It's necessary to pre-chill the glassware when preparing cocktails that are served cold. (True/False)
4. The ice used in cocktails should be stored in a way that it is not exposed to contaminants, such as open-air or odors. (True/False)

Section 3: Short Answer Questions

1. List three important steps to take when preparing the bar area for cocktail service.
2. Explain the role of milk frothing in the preparation of coffee beverages and how you would ensure it's done properly.

Section 4: Practical Assessment

Scenario

You are a new barista and bartender at a high-end hotel lounge. The manager has tasked you with setting up the workstation for a busy evening shift. Your responsibilities include ensuring all necessary materials, tools, and equipment are available for preparing coffee and cocktails. Additionally, you must organize the station efficiently to handle high customer demand while maintaining high-quality standards.

1. What would you do if a specific tool (e.g., milk frother) is unavailable?
2. How would you adjust the workflow if the bar becomes exceptionally busy?
3. How do you ensure the selected materials remain fresh throughout service?



Points to Remember

- Organize and prepare ingredients, tools, and equipment in advance.
- Check stock levels to ensure availability of necessary items.
- Clean glassware and sanitize utensils.
- Set up workstations with garnishes, syrups, and mixers within reach.
- Ensure equipment is clean and functional before starting.



Self-Reflection

1. Performing pre-coffee and cocktail preparation activities is critical to ensuring smooth operations and exceptional customer experiences. Reflecting on this task, I recognize the importance of being organized, attentive, and proactive. Preparing the station with all necessary tools, ingredients, and equipment saves time and reduces stress during service.

My experience	I do not	I know	I have some	I have a lot	I am
Knowledge, skills, and attitudes	have any experience doing this.	a little about this.	experience doing this.	of experience with this.	confident in my ability to do this.
Identify of barista dressing code at the workplace					
Identify of Bartender's dress code at the workplace					
Apply oral, and hand hygiene and bathing for personal hygiene practices					

My experience Knowledge, skills, and attitudes	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Apply Hair and nail care for personal hygiene practices					
Apply Cleaning HACCP guidelines for Bar and coffee shop					
Apply cleaning methods for bar and coffee shop.					
Select materials for espresso coffee					
Select tools and equipment for espresso coffee					
Select materials for special cocktails					
Select tools and equipment for special cocktails					

2. Fill in the table above and share results with the trainer for further guidance.

Areas of strength	Areas for improvement	Actions to be taken to improve
1. 2. 3.	1. 2. 3.	1. 2. 3.

UNIT 2: MAKE ESPRESSO-DERIVATIVE COFFEE



Unit summary

This unit provides you with the knowledge, skills, and attitudes required for preparation of coffee ingredients, applying espresso coffee extraction techniques, steaming of milk and applying Coffee presentation techniques.

Self-Assessment: Unit 2

1. Referring to the unit illustrations above discuss the following:
 - a. What do the illustrations show
 - b. What do you think this unit is about based on the illustrations
2. Complete the self-assessment table below to assess your level of knowledge, skills, and attitudes under this unit.
 - a. There is no right or wrong way to answer this assessment. It is for your reference and self-reflection on the knowledge, skills, and attitudes acquired during the learning process.
 - b. Think about yourself: do you think you have the knowledge, skills, or attitudes to do the task? How well?
 - c. Read the statements and check on a column that best represents your level of knowledge, skills, and attitudes.
 - d. At the end of this unit, you will assess yourself again.

My experience	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Knowledge, skills, and attitudes					
Identify the coffee grinding size					
Brew espresso coffee.					
Extract the espresso coffee					
Steaming milk					
Perform the coffee arts presentation					

My experience	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Knowledge, skills, and attitudes					
Perform the coffee layering presentation					
Use coffee presentation tools					
Select materials for espresso coffee					
Select tool					
Select tools for special coffee					
Identify the equipment for special coffee					
Identify the ingredient for special coffee					



Key Competencies:

Knowledge	Skills	Attitudes
1. Identify Safety precautions	1. Apply Creativity skills	1. Being honest
2. Describe cleaning techniques	2. Apply Proper use of measurement tools	2. Being warmth
3. Identify Personal hygiene standards	3. Apply coffee and cocktail Machine operation	3. Being friendly
4. Identify Industrial SOPs	4. Apply Communication skills	4. Being accountability
5. Perform Basic calculation	5. Apply Collaborative skills	5. Being self-motivated
6. Demonstrate Hygiene knowledge	6. Apply recipes coffee and cocktail preparation skills	6. Being creative and innovate
7. Select materials based on recipes	7. Apply Requesting skills	7. Being professionalism
8. Demonstrate critical thinking knowledge	8. Apply Time management skills	8. Being Safety Consciousness



Discovery activity:



Task 11:

1. How would you describe the flavor profile of each coffee variety? What specific aromas or tastes stand out (e.g., fruity, nutty, chocolatey)?
2. How does the region where coffee is grown (e.g., altitude, climate, soil) influence its flavor and quality? Provide examples.
3. Choose one coffee origin and explain its cultural or historical significance in that country or region.
4. Different origins often pair with specific brewing techniques. What brewing methods are traditionally used for the coffee varieties provided?
5. What role does coffee play in the global economy, and how does the demand for specialty coffee affect the livelihoods of farmers in coffee-growing regions?

Topic 2.1: Preparation of ingredients



Activity 1: Problem Solving



Task 12: Preparation of Ingredients for Derivative Coffee

Scenario:

You are tasked with ensuring all ingredients are prepared for derivative coffee varieties, such as espresso, cappuccino, or latte, in a busy café setting. The goal is to streamline processes, maintain quality, and minimize waste.

1. How can you optimize ingredient storage to ensure freshness and easy access for derivative coffee preparation?
2. What steps can be taken to standardize ingredient measurements for consistent coffee quality?
3. How can you train staff to efficiently handle the preparation of ingredients for high demand periods?
4. What methods can be implemented to reduce waste during ingredient preparation?
5. What tools or technology can enhance the speed and accuracy of ingredient preparation?

Key Facts 2.1 Coffee Ingredients and Their Preparation⁴

- Introduction to Coffee Ingredients and their Preparation



Coffee preparation is a blend of art and science, requiring a keen understanding of ingredients and techniques to create the perfect cup. Whether crafting a simple black coffee or a complex flavored latte, the right combination of dry and liquid ingredients, along with proper preparation methods, ensures a consistent and satisfying result.

⁴ Iriondo-DeHond, A., Iriondo-DeHond, M., & Del Castillo, M. D. (2020). Applications of compounds from coffee processing by-products. *Biomolecules*, 10(9), 1219.

Key dry ingredients like coffee grounds, flavor additives, and sweeteners form the foundation of taste, while liquid ingredients such as water, milk, and flavored syrups enhance the texture and complexity of the beverage.

- **Coffee Dry Ingredients**

- ✓ **Grinding Coffee Beans**

-  **Purpose:** Grinding increases the surface area for extraction, allowing water to interact with the coffee.

-  **Freshness:** Grind coffee just before brewing to preserve flavor and aroma.

-  **Equipment:** Burr grinders offer consistent results, while blade grinders may lead to uneven particles.

- ✓ **Preparing Flavor Additives:**

-  **Types:** Cocoa powder, cinnamon, nutmeg, or ground cardamom are common dry additives.

-  **Usage:** Add during brewing for infusion or sprinkle on the finished beverage for aroma and taste.

- ✓ **Portioning Sugar or Sweeteners:**

-  **Standard Portion:** Typically, 1-2 teaspoons of sugar or equivalent sweeteners per cup.

-  **Alternatives:** Honey, agave syrup, or artificial sweeteners cater to specific dietary needs.

- **Coffee Liquid Ingredients**

- ✓ **Water:**

-  **Quality:** Use filtered water to avoid impurities affecting flavor.

-  **Quantity:**

-  **Temperature:** Ideal brewing temperature is 195°F to 205°F (90°C to 96°C).

- ✓ **Milk:**

-  **Types:** Whole milk provides richness, while skim or plant-based milk (like almond or oat) offers lighter alternatives.

-  **Preparation:** Froth or steam milk for lattes and cappuccinos to enhance texture.

✓ **Flavored Syrups:**

✚ **Common Flavors:** Vanilla, caramel, hazelnut, and seasonal options like pumpkin spice.

✚ **Mixing:** Add directly to the cup before or after brewing; adjust to taste.

• **Coffee Grinding Sizes**

✓ **Coarse Grind:**

✚ **Texture:** Chunky, similar to sea salt.

✚ **Best For:** French press, cold brew, and percolators.

✚ **Characteristics:** Slower extraction, preventing over-brewing.

✓ **Medium Grind:**

✚ **Texture:** Similar to sand.

✚ **Best For:** Drip coffee makers, pour-over, and siphon brewing.

✚ **Characteristics:** Balanced extraction with even flavor.

✓ **Fine Grind:**

✚ **Texture:** Like table salt or powdered sugar.

✚ **Best For:** Espresso machines and Aeropress (short brew time).

✚ **Characteristics:** Quick extraction, bold and concentrated flavor.

• **Espresso-derivative coffee**

✓ **Espresso**

✚ **Ingredients:**

- 7–9 grams of finely ground coffee (single shot)
- Water (about 25–30 ml)

✚ **Preparation:**

- Preheat the espresso machine and portafilter.
- Dose and tamp the ground coffee into the portafilter.
- Insert the portafilter and start the shot.
- Extract for about 25–30 seconds.

✓ **Doppio (Double Espresso)**

✚ **Ingredients:**

- 14–18 grams of finely ground coffee
- Water (50–60 ml)

 Preparation:

- Follow the same method as a single espresso, but use a double basket.
- Extract for about 25–30 seconds.

✓ **Ristretto**

 Ingredients:

- 7–9 grams of finely ground coffee
- Water (15–20 ml)

 Preparation:

- Use the same amount of coffee as espresso.
- Use less water and extract for a shorter time (15–20 seconds).

✓ **Lungo**

 Ingredients:

- 7–9 grams of finely ground coffee
- Water (45–60 ml)

 Preparation:

- Use the same amount of coffee as espresso.
- Extract for a longer time (40–50 seconds).

✓ **Americano**

 Ingredients:

- 1 shot of espresso (30 ml)
- Hot water (90–120 ml)

 Preparation:

- Prepare a shot of espresso.
- Add hot water to the espresso (espresso first, then water).

✓ **Cappuccino**

 Ingredients:

- 1 shot of espresso (30 ml)
- Steamed milk (60 ml)
- Milk foam (60 ml)

 Preparation:

- Brew an espresso shot.
- Steam and texture milk to a creamy foam.
- Pour equal parts steamed milk and foam over the espresso.

✓ **Latte**

 Ingredients:

- 1 shot of espresso (30 ml)

- Steamed milk (150–180 ml)
- Light milk foam (1–2 cm)

 Preparation:

- Brew espresso.
- Steam milk with little foam.
- Pour milk into espresso, finishing with a thin layer of foam.

✓ **Flat White**

 Ingredients:

- 1 shot of espresso (or ristretto)
- Steamed milk (120 ml)
- Very thin milk foam

 Preparation:

- Brew espresso or ristretto.
- Steam milk to microfoam texture.
- Pour milk over espresso with minimal foam.

✓ **Macchiato**

 Ingredients:

- 1 shot of espresso (30 ml)
- A dollop of milk foam

 Preparation:

- Brew espresso.
- Add a small spoonful of milk foam on top.

✓ **Mocha**

 Ingredients:

- 1 shot of espresso (30 ml)
- Steamed milk (120 ml)
- Chocolate syrup or cocoa (15–30 ml)
- Whipped cream (optional)

 Preparation:

- Mix chocolate syrup with the espresso.
- Add steamed milk.
- Top with whipped cream (optional).



Activity 2: Guided Practice



Task 13:

A guided practice question for preparing ingredients for espresso coffee.

Scenario

You are a barista at a busy café that prides itself on serving high-quality espresso. A customer has just ordered a double shot of espresso, and it's your task to prepare it efficiently.

1. What steps will you take to ensure the grind size is suitable for espresso? How will you verify its consistency?
2. What actions are required to prepare the portafilter for use, considering its current state?
3. How much ground coffee will you use for a double shot, and why is accurate measurement important?
4. Describe the correct tamping technique and explain its significance in espresso preparation.
5. How will you confirm that the espresso shot meets the desired quality standard (e.g., extraction time, crema, and taste)?



Activity 3: Application



Task 14:

You are working as a barista in a busy coffee shop. A customer has ordered an espresso, and you need to ensure that all the ingredients and equipment are properly prepared before making the espresso.

1. List the key ingredients and equipment you need for preparing a high-quality espresso.
2. Describe the steps involved in preparing the ingredients (e.g., grinding coffee beans, measuring the correct amount of coffee, and preparing the espresso machine).
3. Explain how you would adjust the preparation process if you noticed the coffee beans were slightly older or the espresso machine was not reaching the ideal temperature.
4. Discuss how the quality of the ingredients impacts the final taste of the espresso and what adjustments you might make if the espresso does not meet the expected standards.
 - a. Perform the steps involved in preparing ingredients the requested espresso.

Topic 2.2: Espresso coffee extraction process



Activity 1: Problem Solving



Task 15:

You are working as a barista, and a customer has ordered an espresso, but the shot you pull turns out to be weak, watery, and under-extracted. Upon reviewing your process, you suspect the following:

1. The coffee grind might be too coarse.
2. The tamping pressure might be uneven.
3. The water temperature could be too low.
4. The extraction time is shorter than usual.

Task:

1. Diagnose the potential issues in the espresso extraction process based on the symptoms described above.
2. Explain how each of the suspected factors (grind size, tamping pressure, water temperature, and extraction time) affects the espresso extraction and contributes to the weak, watery shot.
3. Propose specific adjustments or steps you would take to resolve the problem and pull a perfect shot of espresso.
4. Describe how you would monitor and evaluate the adjustments to ensure the espresso meets the desired quality.

Key Facts 2.2: Espresso coffee extraction process⁵

- **Selecting Coffee Beans**



- ✓ **Bean Types:** Arabica beans are known for their smooth and flavorful profile, while Robusta beans are stronger, more bitter, and have higher caffeine content.
 - ✓ **Roast Levels:** Lighter roasts retain more of the original flavors of the beans, while darker roasts have a stronger, bolder taste and more roasted flavors.
 - ✓ **Freshness:** Freshly roasted beans (used within a week or two of roasting) yield better-tasting espresso due to the preserved oils and volatile compounds.
 - ✓ **Origin and Flavor Profile:** The origin of the beans affects their flavor profile; beans from Central America tend to be bright and fruity, while those from Africa often have floral and berry notes.
- **Grinding Coffee Beans**
 - ✓ **Match Grind Size to Brewing Method:** For espresso, a fine grind is necessary to allow proper extraction within a short brew time. Coarser grinds are used for methods like French press or drip brewing.
 - ✓ **Use a Quality Grinder:** A burr grinder ensures a consistent grind size, essential for even extraction, compared to blade grinders that produce uneven sizes.
 - ✓ **Grind Just Before Brewing:** Grinding fresh ensures that the coffee retains its essential oils and aromas, which are lost once ground coffee sits too long.
 - **Preheating the Espresso Machine**
 - ✓ **Importance of Preheating:** Preheating ensures the machine is at the correct temperature for brewing, maintaining consistent temperature stability throughout the shot.
 - ✓ **Steps to Preheat the Espresso Machine:** Run water through the machine to bring the portafilter and group head up to the desired temperature.

⁵ Cordoba, N., Fernandez-Alduenda, M., Moreno, F. L., & Ruiz, Y. (2020). Coffee extraction: A review of parameters and their influence on the physicochemical characteristics and flavour of coffee brews. *Trends in Food Science & Technology*, 96, 45-60.

- ✓ **Tips for Effective Preheating:** Allow the machine to fully heat up (usually 10–15 minutes) before pulling a shot, and ensure the portafilter is also preheated.

✚ Portafilter Preparation

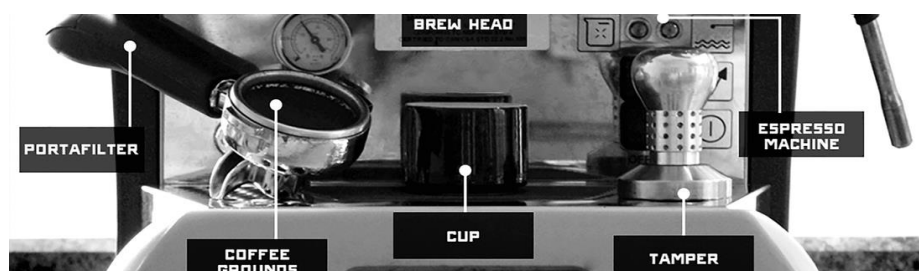
- ✓ **Clean and Dry the Portafilter:** Any moisture or leftover coffee can affect the even distribution of grounds and lead to inconsistent extraction.
- ✓ **Properly Dose and Distribute Coffee Grounds:** Ensure the correct amount of coffee is used (usually 18-20g for a double shot) and distribute the grounds evenly to avoid channeling.
- ✓ **Tamp with Consistent Pressure:** A firm, even tamp (around 30 lbs of pressure) ensures uniform extraction by compressing the coffee grounds evenly in the portafilter.

✚ Brewing the Espresso Shot



- ✓ **Preparing the Coffee Grounds:** Ensure the coffee grounds are evenly distributed and tamped to avoid uneven extraction and bitter flavors.
- ✓ **Brewing the Espresso Shot:** Start the shot and observe the flow of espresso; it should be a steady stream, not dribbling or too fast, to ensure proper extraction.
- ✓ **Observing Quality Indicators:** The espresso should have a rich crema, golden-brown color, and the right balance of sweetness, bitterness, and acidity.
- **Extraction Time**
 - ✓ **Standard Extraction (25–30 Seconds):** This is the optimal extraction time for most espresso shots, balancing flavor, sweetness, and intensity.
 - ✓ **Under-Extraction (<20 Seconds):** Short extraction times can lead to sour, weak, or underdeveloped flavors, as not enough of the coffee's oils and flavors are extracted.
 - ✓ **Over-Extraction (>35 Seconds):** A long extraction time can pull bitter, harsh compounds from the coffee, making the shot taste unpleasant and over-roasted.

- **Collecting the Espresso Shot**
 - ✓ **Standard Espresso Shot Collection:** A single shot of espresso typically yields about 1 ounce (30 ml), while a double shot yields about 2 ounces (60 ml).
 - ✓ **Ristretto Shot Collection:** A ristretto shot uses less water, resulting in a more concentrated, intense flavor, typically around 0.75 ounces (22 ml) for a double shot.
 - ✓ **Lungo Shot Collection:** A Lungo shot is a longer espresso shot, using more water than a standard shot (around 1.5 to 2 ounces), resulting in a milder, less concentrated flavor compared to a regular shot.
- **Portafilter Preparation:**
 - ✓ **Cleaning:** Ensure the portafilter is clean and free from old coffee grounds. Use a brush or a cloth to wipe away any residue.
 - ✓ **Grinding:** Grind the coffee beans just before brewing to preserve freshness. The grind should be fine, similar to table salt, for optimal extraction.
 - ✓ **Tamping:** After adding ground coffee to the portafilter, use a tamper to press the grounds down evenly and firmly. Aim for around 30 pounds of pressure. An even tamp helps avoid channeling and ensures uniform extraction.
 - ✓ **Leveling:** Ensure the coffee bed is level before tamping. This ensures uniform water flow during extraction.
- **Distribution:** Some baristas use a distribution tool to evenly spread the coffee grounds across the portafilter before tamping to avoid uneven extraction. **Brewing the Espresso Shot:**



- ✓ **Pre-Infusion:** Some espresso machines use pre-infusion, which lightly wets the coffee grounds before full pressure is applied. This helps ensure an even extraction.

- ✓ **Pressure:** The ideal brewing pressure for espresso is around 9 bars (130 psi), which allows for optimal extraction of flavors.
- ✓ **Water Temperature:** The water temperature should be between 190°F and 200°F (88°C to 93°C) to extract the right flavors without over-extracting or under-extracting.
- ✓ **Extraction Time:** A standard espresso shot should take between 25-30 seconds to brew, though it can vary based on grind size, dose, and tamping pressure.
- ✓ **Shot Quality:** The shot should have a rich, golden crema on top, a sign of a well-extracted espresso. A good espresso shot will balance bitterness, sweetness, and acidity, with a smooth body.
- ✓ **Monitoring Volume:** For a standard espresso, aim for about 1 ounce (30 mL) of liquid per shot. Some variations may include ristretto (shorter shot) or lungo (longer shot), which require slight adjustments.



Activity 2: Guided Practice



Task 16:

You are preparing to extract an espresso for a customer. The espresso machine and grinder are ready, but you need to focus on the extraction process to ensure a high-quality result.

1. What is the ideal grind size for espresso, and why is it important for the extraction process?
2. Describe the process of dosing the ground coffee into the portafilter. How much coffee should you use, and how do you ensure that it is evenly distributed?
3. Once the coffee is tamped into the portafilter, explain the next steps involved in locking the portafilter into the espresso machine. What should you check before starting the extraction?
4. Explain the key indicators to look for during the extraction (e.g., timing, flow rate, and crema). What should the espresso look like if it's extracted correctly?
5. If the espresso is coming out too quickly or too slowly, what adjustments might you make to improve the extraction process?



Activity 3: Application



Task 17:

You are assigned to prepare an espresso for a customer at a café known for its high-quality coffee. The café values precision and consistency in espresso preparation. Your task is to extract the perfect espresso shot by performing the following tasks:

1. Set up your station and list all the equipment and ingredients you need to extract the espresso shot.
2. Describe the process for grinding the coffee beans, dosing the grounds, and tamping them in the portafilter. What are the key factors that affect the consistency of your grind, dose, and tamp?
3. Explain how you would preheat the espresso machine and prepare the portafilter before starting the extraction.
4. Once you begin the extraction, describe the visual and sensory cues you would use to assess the quality of the espresso shot (e.g., crema, flow rate, color).
5. If you notice that the espresso shot is pulling too fast or too slow, how would you adjust the grind, dose, or tamping pressure to achieve a balanced extraction?
6. Evaluate the taste of the espresso shot and explain how its flavor (e.g., bitterness, acidity, balance) reflects the quality of the extraction process. If the shot is off, what changes would you make in your preparation?

Topic 2.3 Steaming of milk.



Activity 1: Problem Solving



Task 18:

You are a barista at a coffee shop, and you've just started steaming milk for a cappuccino. However, you notice that the milk is not frothing properly. Instead of achieving a smooth, velvety texture, the milk is either too frothy and airy or remains too thin with no foam. This is affecting the overall quality of the drinks, and customers are becoming dissatisfied.

Tasks:

1. What are the potential reasons why the milk is not frothing correctly? List at least three possible factors that could be influencing the milk's texture.
2. How would you address each of the potential causes you identified? Offer specific steps to improve the milk frothing process.
3. If the steam wand or milk frothing equipment is not working properly (e.g., insufficient steam pressure, improper placement of the steam wand), how would you diagnose the problem and resolve it?
4. How would the temperature and freshness of the milk affect the steaming process? Explain the ideal temperature range for steaming milk and how you would adjust your technique based on milk type (e.g., whole milk, skim milk, or alternative milk).
5. Once you've made the necessary adjustments, describe how you would test whether the milk is now steaming correctly. What visual and sensory cues would you look for to confirm that the milk is properly steamed?

Key Facts 2.3: Steaming of milk.⁶

- **Types of Milk Foam for Coffee**



- ✓ **Dense -Foam:** Thick, large bubbles that create a dense foam. Often used for drinks like lattes.
- ✓ **Airy Foam:** Very airy, with small, tight bubbles, and a drier texture. Typically used for cappuccinos.
- ✓ **Warm milk:** Smooth and creamy with a higher liquid content. It is often used for macchiatos and flat whites.
- ✓ **Cold Foam:** Foam created without heat, used for iced coffee beverages.

- **Milk Foaming Techniques**

Steamed milk plays a crucial role in creating a variety of coffee drinks like lattes, cappuccinos, and flat whites. Here's a detailed guide to steaming milk effectively:

- ✓ **Equipment Needed:**

- ✚ Espresso machine with a steam wand.
- ✚ Stainless steel milk pitcher.
- ✚ Fresh, cold milk (whole milk is recommended for better texture).

⁶ Santini, G. (2022). Biochemical characteristics of cappuccinos made with high-quality pasteurized milk and UHT milk at different steam injection conditions.

✓ **Preparing the Milk:**

- ✚ Use fresh, cold milk for best results.
- ✚ Fill the pitcher no more than halfway to allow room for milk expansion.
- ✚ Whole milk creates a creamier texture, while non-dairy options like almond, oat, or soy milk require more care due to their lower protein content.

• **Technique Steps:**

✓ **Stretching the Milk (Aeration):**

- ✚ **Goal:** Incorporate air into the milk to create microfoam.
- ✚ Place the steam wand tip just below the surface of the milk.
- ✚ Turn on the steam wand fully to create a gentle hissing sound (not loud splashing).
- ✚ Keep the tip near the surface until the milk has expanded slightly (usually 3-5 seconds).

✓ **Texturing the Milk:**

- ✚ **Goal:** Create a silky-smooth texture by mixing air into the milk and heating it.
- ✚ Submerge the steam wand deeper into the milk after stretching.
- ✚ Tilt the pitcher slightly to create a whirlpool or vortex effect.
- ✚ Maintain this motion to evenly distribute heat and foam.

✓ **Key Points to Remember:**

- ✚ **Temperature:** Stop steaming when the pitcher becomes too hot to touch (around 60–65°C or 140–150°F). Overheating can scald the milk, creating a burnt taste.
- ✚ **Foam Consistency:** For lattes, aim for minimal foam and smooth milk. For cappuccinos, create thicker foam. For flat whites, the microfoam should be extremely fine and barely noticeable.
- ✚ **Cleanliness:** Immediately wipe the steam wand with a damp cloth and purge it by briefly turning on the steam to avoid milk residue buildup.

✓ **Troubleshooting Tips:**

- ✚ **Too much foam:** Reduce the time spent stretching the milk.
- ✚ **Not enough foam:** Place the steam wand tip closer to the surface during the stretching phase.
- ✚ **Burnt taste:** Stop steaming before the milk becomes too hot.

- ✚ **Large bubbles:** Ensure the steam wand is just below the milk surface and tilt the pitcher to create a vortex.
- ✓ **Practice and Experimentation:**
 - ✚ Different milk types (whole, skim, non-dairy) will behave differently.
 - ✚ Adjust technique based on the desired drink and milk type.
 - ✚ Consistent practice will improve texture and foam quality.
- **Milk foam making**
 - ✓ **Steam Wand Technique (Espresso Machine):** Uses a steam wand to heat and froth milk by injecting air, creating rich and creamy foam.
 - ✓ **Handheld Milk Frother:** A battery-operated device that whisks air into milk, typically for smaller quantities, creating light foam.
 - ✓ **French Press Method:** Frothing milk by using a French press to pump air into the milk, resulting in light foam.
 - ✓ **Manual Whisking:** Frothing milk by hand with a whisk, a more labor-intensive method but effective for small amounts.
 - ✓ **Jar Shaking:** Frothing by shaking milk in a jar, creating foam by forcing air into the liquid.
 - ✓ **Automatic Milk Frother:** A machine that froths milk automatically by spinning it and heating it, offering consistency and ease.
- **Foam Steaming Factors**
 - ✓ **Milk Type:** Different milk types create varying textures (e.g., cow's milk is rich in protein, while oat milk can foam but with less stability).
 - ✓ **Milk Temperature:** The optimal temperature range for steaming milk is 140–160°F (60–70°C) to create smooth foam without scalding.
 - ✓ **Aeration Time:** The longer air is incorporated into the milk, the frothier it becomes, but over-aerating leads to dry foam.
 - ✓ **Milk Freshness:** Fresher milk tends to froth better, as it contains more stable proteins and fats.
 - ✓ **Steam Wand Position:** The position of the steam wand affects how milk is aerated, typically submerged for heating and angled for aeration.

- ✓ **Steam Wand Angle:** A slight angle allows the milk to swirl and incorporate air evenly, creating smooth foam.
- ✓ **Milk Volume:** The volume of milk influences how well it foams; too little or too much can affect texture.
- ✓ **Equipment Quality:** High-quality steam wands and frothers provide better control over temperature and aeration, leading to superior foam.
- ✓ **Technique Consistency:** Mastering the right technique and consistency in frothing helps achieve the perfect foam every time.
- ✓ **Protein Content in Milk:** The higher the protein content, the better the foam stability (e.g., whole milk has higher protein than skim milk).
- ✓ **Cleaning the Steam Wand:** Regular cleaning ensures that no milk residue affects the steam wand's performance or the quality of foam.



Activity 2: Guided Practice



Task 19:

Steaming milk for coffee is used to create creamy, frothy milk for beverages like lattes, cappuccinos, and flat whites. Explain a step-by-step guide on how to steam milk properly:

1. How will you prepare the following Equipment?
 - a. Espresso Machine with Steam Wand
 - b. Milk Pitcher
 - c. Thermometer (optional)
2. How will you Pour Milk into the Pitcher?
3. How will Purge the Steam Wand?
4. How to Positioning the Steam Wand
5. How will you Start Steaming the milk?
6. Explain to Monitor the Temperature while extracting the espresso.
7. Explain how to Finish Steaming
8. Talk about the coffee Pour and Serve to guests.



Activity 3: Application



Task 20:

You are working as a barista at a local coffee shop in Kigali. The shop prides itself on its high-quality espresso drinks, and your manager has tasked you to prepare a perfect cappuccino for a loyal customer who orders it every morning. The customer prefers a creamy texture with a rich flavor and a smooth finish. Your goal is to steam the milk perfectly to meet their expectations.

1. What are the ideal temperature and texture requirements for steaming milk for a latte, and how do you ensure these are met?
2. What steps should you follow to properly clean and prepare the steam wand before and after steaming milk?
3. If you notice the milk has become too frothy for a latte, how can you adjust the technique to achieve the correct texture?
4. Why is it important to listen to the sound of the steaming process, and what sounds indicate the milk is being properly textured?
5. What should you do if a customer expresses dissatisfaction with the steamed milk consistency in their latte?

Topic 2.4 Applying coffee presentation techniques.



Activity 1: Problem Solving



Task 21:

Scenario:

You are a barista at a high-end coffee shop. A customer orders a cappuccino and request to be served with an artistic foam design. While preparing, you realize that the milk frother isn't functioning as expected, making it difficult to achieve the right foam consistency for latte art.

1. What steps will you take to resolve the issue while ensuring the customer receives a high-quality cappuccino with the requested presentation?
2. How will you communicate with the customer if the issue causes a delay or adjustment to their order?
3. How do various coffee presentation techniques (e.g., latte art, serving style, and cup selection) impact the overall guest experience in a hospitality setting?
4. In what ways can the coffee presentation techniques influence customer satisfaction and brand perception in cafés and hotels?
5. How can baristas and hospitality staff be trained to master coffee presentation techniques to create a visually appealing and consistent experience for guests?

Key Facts 2.4: Applying coffee presentation techniques.⁷

Coffee presentation techniques		
Techniques	Image	Identification
Latte Art		Involves creating designs or patterns on the surface of a latte by pouring steamed milk into espresso.

⁷ Loresco, P. J., Meimban, R. J., Aseo, A., Aniez, R., Furiscal, N., & Jugueta, E. J. (2023, November). Identifying Rust Infection and Estimating Severity on Coffee Leaves Using Vision-Based ANN-KNN-Thresholding Methods. In *2023 IEEE 15th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management (HNICEM)* (pp. 1-6). IEEE.

		Common designs include hearts, rosettas, tulips, and swans.
Layered Coffee		Achieved by carefully layering coffee, milk, and other ingredients (e.g., syrups) of varying densities. Common types include macchiatos and layered lattes. A clear glass mug is ideal for displaying the distinct layers.
Garnishes		Enhance visual appeal and flavor with toppings like cinnamon, cocoa powder, or grated chocolate. Other creative garnishes include edible flowers, caramel drizzle, or powdered sugar stencils

Artistic Mugs and Glassware		Unique and eye-catching mugs or glasses enhance the overall coffee experience. Examples include double-walled glass cups, shaped ceramics, or hand-painted designs.
Accompaniments		Pair coffee with snacks like biscotti, chocolate, or miniature pastries for a complimentary presentation. Arrange accompaniments neatly on the tray for aesthetic impact.
Creative Use of Foam and Colors		Use milk foam to create patterns or textures; add food-safe edible colors for vibrancy. Foam art can mimic designs such as animals, flowers, or abstract shapes.

Storytelling with Coffee Themes		Present coffee with a narrative or theme, e.g., holiday-themed designs or cultural motifs. Use props like napkins, decorations, or thematic serving trays.
Coffee Trays		A well-organized tray adds elegance and convenience. Include essential items like spoons, sugar, napkins, and garnishes in a symmetrical arrangement.
Coffee Presentation Tools		
Double-Walled Glass Cups		Keep beverages warm while allowing visual appreciation of layers or latte art. Prevent condensation and provide a safe grip.
Latte Art Pitcher		Essential for steaming milk and pouring intricate latte art designs. Features a narrow spout for precision.

Chemex Coffee Maker (with Glass Serving Carafe)		Combines brewing and serving in one elegant device. It produces a clean, rich coffee flavor that is ideal for specialty presentations.
Coffee Layering Tools		
Coffee Mug or Cup		Transparent glass cups are best for showcasing layers. Proper size ensures the proportions of layers are visually appealing.
Coffee Stirrer or Spoon		Used for gentle layering by slowing the pour of liquids. Keeps layers distinct without blending.
Coffee Arts		
Latte Art Pens (Etching Pens)		Used to create detailed designs on the foam surface by "etching" patterns.

		Great for adding intricate details to latte art.
Stencils for Coffee Art		Easy tool for creating uniform shapes or designs with powdered toppings. Available in various themes and patterns.
Frothing Jug with Built-In Spout		Ensures accurate milk frothing and controlled pouring for latte art. Built-in spout is ideal for creating precise shapes.



Activity 2: Guided Practice



Task 22:

Scenario:

In XWU, you are a barista tasked with presenting a premium cup of coffee to a VIP guest at a high-end café. The guest has requested a cappuccino with an artistic presentation. You have all the necessary tools: a coffee machine, fresh coffee beans, milk, a milk frother, and latte art tools. The guest is seated at a table near the counter, watching you prepare their coffee.

1. What steps will you take to ensure the coffee beans and equipment are ready for use?
How will you ensure cleanliness and hygiene during preparation?
2. How will you determine the right coffee grounds for a perfect espresso shot?
What techniques will you use to achieve a balanced extraction

3. How will you froth the milk to create a smooth, velvety texture?
What temperature should the milk be, and how will you monitor it?
What design will you create for the cappuccino, and why?
How will you ensure precision and aesthetic appeal in your latte art?
4. How will you present the cappuccino to the guest (e.g., tray, garnish, positioning)?
What words or gestures will you use to enhance the guest's experience?



Activity 3: Application



Task 23:

You are a barista at the Four Points by Sheraton Kigali. The hotel is hosting a VIP breakfast meeting for executives, and you've been tasked with presenting the coffee to showcase your skills and enhance the guest experience. You have a selection of premium coffee beans, state-of-the-art brewing equipment, and a curious audience who appreciates quality coffee.

1. "What aromas or notes do you detect when smelling the freshly ground coffee?"
2. How would you customize your coffee presentation to cater to the preferences and expectations of the VIP executives at the breakfast meeting?
3. What steps would you take to highlight the unique qualities of the premium coffee beans you're using during the presentation?
4. How would you use the state-of-the-art brewing equipment to demonstrate your expertise and enhance the overall guest experience?
5. If an executive asks for recommendations on selecting a coffee to pair with their breakfast, how would you respond?
6. How would you engage the audience to make the presentation interactive and leave a lasting impression of the Four Points by Sheraton Kigali's hospitality?



Formative Assessment

Formative Assessment: Making Espresso-Derivative Coffee

To assess the student's ability to prepare espresso-based coffee beverages, ensuring proper technique, equipment handling, and understanding of drink variations.

Assessment Components:

1. Multiple-choice questions to assess a student's ability to prepare espresso-based coffee beverages:

a. What is the ideal brewing time for a single shot of espresso?

- A. 10-15 seconds
- B. 20-30 seconds
- C. 35-40 seconds
- D. 45-50 seconds

b. When steaming milk for a latte, the milk texture should be:

- A. Very frothy, with large bubbles
- B. Thin and watery with no foam
- C. Smooth and velvety, with microfoam
- D. Completely liquid, with no foam

c. Which of the following is NOT an espresso-based drink?

- A. Cappuccino
- B. Americano
- C. Flat White
- D. Drip Coffee

2. Theoretical Knowledge.

a. Identify Espresso-Derivative Drinks.

- A. Explain the components of two espresso-based drinks (e.g., latte, flat white).

b. Equipment and Maintenance.

- A. Describe the importance of cleaning the espresso machine daily.
- c. **Taste and Quality Standards.**
 - A. Identify two common issues with espresso (e.g., over-extraction, under-extraction) and how to resolve them.

3. Soft Skills.

- a. **Time Management.**
 - A. Complete the process within the allocated time (10–15 minutes).
- b. **Customer Interaction Simulation.**
 - A. Role-play a barista serving a customer, focusing on professionalism and communication.

4. Practical Skills

- a. **Preparation and Setup.**
 - A. Check the espresso machine and ensure it is clean and operational.
 - B. Assemble necessary tools (tamper, grinder, cups).
 - C. Verify ingredient quality (coffee beans, milk, etc.).
- b. **Espresso Shot Extraction.**
 - A. Dose coffee grounds correctly (18-20g).
 - B. Tamp evenly and consistently.
 - C. Pull a shot within 25–30 seconds, achieving the desired crema.
- c. **Milk Frothing.**
 - A. Steam milk to create microfoam with a smooth, velvety texture.
 - B. Maintain proper temperature (60-65°C).
- d. **Drink Assembly.**
 - A. Prepare one espresso-derivative drink of choice (e.g., cappuccino, latte, macchiato).
 - B. Pour milk art or present the drink attractively.
 - C. Clean workspace after preparation.



Points to Remember

- Espresso: Base for popular drinks like lattes and cappuccinos.
- Prep: Use fresh beans, correct grind, filtered water, preheat tools.
- Extraction: Tamp evenly, 25–30 sec shot, ideal temp 90–96°C, check for crema.
- Milk: Cold milk, macrofoam, steam to 55–65°C.
- Presentation: Serve hot, clean cup, add latte art and side item if needed.



Self-Reflection

Read the statements across the top. Put a check in a column that best represents your level of knowledge, skills and attitudes.

My experience	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Knowledge, skills, and attitudes					
Identify the coffee grinding size					
Brew and extract espresso coffee.					
Steaming milk is based on the types of foams.					
Perform the coffee arts presentation					
Perform the coffee layering presentation					

My experience	I do not	I know	I have some	I have a lot	I am
Knowledge, skills, and attitudes	have any experience doing this.	a little about this.	experience doing this.	of experience with this.	confident in my ability to do this.
Use coffee presentation tools					
Select materials for espresso coffee					
Select tools and equipment for special coffee					

3. Fill in the table above and share results with the trainer for further guidance.

Areas of strength	Areas for improvement	Actions to be taken to improve
1.	1.	1.
2.	2.	2.
3.	3.	3.

UNIT 3: MAKE ADVANCED COCKTAILS.



Unit summary

This unit provides you with the knowledge, skills, and attitudes required to prepare cocktail ingredients, Produce advanced cocktails, and present different types of advanced cocktails.

Self-Assessment: Unit 3

1. Referring to the unit illustrations above discuss the following:
 - a. What do the illustrations show
 - b. What do you think this unit is about based on the illustrations
2. Complete the self-assessment table below to assess your level of knowledge, skills, and attitudes under this unit.
 - a. There is no right or wrong way to answer this assessment. It is for your reference and self-reflection on the knowledge, skills, and attitudes acquired during the learning process.
 - b. Think about yourself: do you think you have the knowledge, skills, or attitudes to do the task? How well?
 - c. Read the statements and check on a column that best represents your level of knowledge, skills, and attitudes.
 - d. At the end of this unit, you will assess yourself again.

My experience	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Knowledge, skills, and attitudes					
Select the cocktail ingredients.					
Present ingredients for cocktails based on the recipe.					
Produce advanced cocktails.					

My experience	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Knowledge, skills, and attitudes					
Apply the cocktails Presentation techniques					



Key Competencies:

Knowledge	Skills	Attitudes
1. Identify safety precautions	1. Apply Creativity skills	1. Being honest
2. Identify cleaning technics	2. Apply Proper use of measurement tools	2. Being warmth
3. Identify Personal hygiene standards	3. Operate the coffee Machine	3. Being friendly
4. Identify Industrial SOPs	4. Apply Communication skills	4. Being accountability
5. Apply Basic calculation	5. Apply Collaborative skills	5. Being self-motivated
6. Apply Hygiene knowledge	6. Apply recipes coffee and cocktail preparation skills	6. Being creative and innovate
7. Select materials based on recipes	7. Apply Requesting skills	7. Being professionalism
8. Apply Critical thinking knowledge	8. Apply time management skills	8. Being Safety Consciousness



Discovery activity:



Task 24:

You are a mixologist enrolled in an advanced cocktail-making workshop. The event is hosted by an internationally renowned bartender, known for their expertise in creating visually stunning, flavorful, and innovative cocktails. The workshop is held in an elegant bar setup, equipped with premium spirits, fresh ingredients, and cutting-edge tools for mixology.

During the session, you will learn about advanced techniques, such as using molecular gastronomy, infusing spirits, creating custom bitters, and achieving perfect balance in complex cocktails. Participants are encouraged to experiment, create their signature cocktail, and share their experiences.

1. What factors should you consider when balancing flavors (sweet, sour, bitter, and umami) in advanced cocktail-making?
2. How can molecular gastronomy techniques, such as foams or specification, enhance the visual and taste appeal of a cocktail?
3. What steps should you follow to infuse spirits with unique flavors while ensuring they complement the overall cocktail design?
4. How do you decide on the right glassware, garnishes, and presentation techniques to elevate the drink experience?
5. What is one potential signature cocktail you could create during the workshop, and what makes it unique compared to classic recipes?

Topic 3.1: Preparation methods of cocktails ingredients



Activity 1: Problem Solving



Task 25:

Scenario:

A new bartender at a high-end hotel is learning how to prepare cocktails efficiently and consistently. The cocktail menu includes a variety of drinks, and the bartender is struggling to keep up with the preparation of ingredients while maintaining quality and speed. The manager noticed that some cocktails were inconsistently prepared, and certain ingredients took too long to prepare. The bartender needs to learn the correct methods for preparing cocktail ingredients to improve both efficiency and consistency.

1. How can the bartender organize and prepare ingredients in advance to streamline cocktail preparation?
2. What are the key differences between shaking, stirring, and muddling ingredients, and when should each technique be used for optimal flavor extraction?
3. How can the bartender ensure that the quality and consistency of cocktail ingredients are maintained when preparing in bulk or storing them for later use?
4. What tools and equipment should the bartender use to ensure accurate measurements and ingredient preparation, and how can the bartender improve their skills with these tools?
5. If a cocktail recipe calls for a unique or uncommon ingredient, how can the bartender research and prepare it efficiently to meet customer expectations without delaying service?

Key Facts 3.1: Preparation Methods of Cocktail Ingredients for Various Alcohol Bases.⁸

Cocktail	Ingredients	Preparation tips
Gin-Based Cocktails	Gin, citrus juices, tonic water, vermouth, and herbs like basil or mint.	✚ Use quality dry gin to maintain the flavor balance. ✚ Muddle herbs lightly to release essential oils without overpowering the drink. ✚ Mix with fresh citrus juices (e.g., lime, lemon) for vibrant flavors. ✚ Common examples: Gin & Tonic, Negroni, Tom Collins
Rum-Based Cocktails	Rum (light, dark, or spiced), tropical fruits (pineapple, lime, coconut), syrups, and bitters.	✚ Use dark or aged rum for richer flavors; light rum suits fruitier cocktails. ✚ Blend with tropical ingredients for classic Caribbean-style drinks.

⁸ Day, A., Fauchald, N., & Kaplan, D. (2018). *Cocktail Codex: Fundamentals, Formulas, Evolutions [A Cocktail Recipe Book]*. Ten Speed Press.

		✚ Use crushed ice to enhance the tropical vibe. ✚ Common examples: Mojito, Daiquiri, Piña Colada.
Tequila-Based Cocktails	Tequila (blanco, reposado, or añejo), citrus (lime, orange), and chili spices.	✚ Use 100% agave tequila for authenticity. ✚ Salt the rim of glasses for added flavor contrast. ✚ Blend with fresh lime juice for signature zesty notes. ✚ Common examples: Margarita, Paloma, Tequila Sunrise. ✚
Whisky-Based Cocktails	Whisky (Scotch, Bourbon, or Rye), bitters, sugar, and water	✚ Use high-quality whisky to bring out nuanced flavors. ✚ Stir instead of shaking to preserve the whisky's profile. ✚ Add a large ice cube to dilute slowly and maintain the taste.

		Common examples: Old Fashioned, Whisky Sour, Manhattan
Vodka-Based Cocktails	Vodka, fruit juices, syrups, and carbonated beverages.	- Use neutral vodka to highlight the mixers' flavors. - Infuse vodka with fruits or spices for extra depth. - Shake with ice to ensure thorough mixing and chilling. - Common examples: Martini, Cosmopolitan, Bloody Mary.
Brandy-Based Cocktails	Brandy, citrus, sugar, spices, and sometimes egg whites.	- Use aged brandy for a smoother, richer cocktail. - Combine with warm spices like nutmeg or cinnamon for seasonal cocktails. - Serve in snifters for a sophisticated touch. - Common examples: Sidecar, Brandy Alexander, Hot Toddy

Wine-Based Cocktails	Red, white, or sparkling wine, fresh fruits, liqueurs, and soda water.	✚ Use light, fruity wines to enhance mixability. ✚ Incorporate fresh fruits like berries or citrus for sangrias or spritzers. ✚ Chill wine before mixing to maintain refreshing qualities. ✚ Common examples: Sangria, Mimosa, Kir Royale.
Classic Cocktails	1. Martini Ingredients: 60 ml gin, 10 ml dry vermouth, Lemon twist or olive for garnish	✚ Chill a martini glass with ice water. ✚ In a mixing glass, add gin and dry vermouth. ✚ Fill with ice and stir for 30 seconds. ✚ Strain into the chilled martini glass. ✚ Garnish with a lemon twist or olive.
	2. Negroni Ingredients: 30 ml gin, 30 ml Campari, 30 ml sweet vermouth, orange slice for garnish	✚ Fill a mixing glass with ice. ✚ Add gin, Campari, and sweet vermouth. ✚ Stir well until chilled. ✚ Strain into a rocks glass filled with ice. ✚ Garnish with an orange slice.

	3. Old Fashioned Ingredients: 60 ml bourbon or rye whiskey, 1 sugar cube, 2 dashes Angostura bitters, orange twist, few drops of water	 Muddle sugar, bitters, and water in a glass.  Add ice and pour whiskey over.  Stir gently.  Garnish with orange twist.
Tropical Cocktails	1. Pina Colada Ingredients: 60 ml white rum, 90 ml pineapple juice, 30 ml coconut cream, Pineapple slice & cherry for garnish	 Blend all ingredients with ice until smooth.  Pour into a hurricane or tall glass.  Garnish with pineapple slice and cherry.
	2. Mai Tai Ingredients: 30 ml light rum, 30 ml dark rum, 15 ml orange curaçao, 15 ml lime juice, 10 ml orgeat syrup, Mint sprig for garnish	 Shake all ingredients (except dark rum) with ice.  Strain into a glass with crushed ice.  Float dark rum on top.  Garnish with mint.
	3. Blue Lagoon Ingredients: 40 ml vodka, 20 ml blue curaçao, 100 ml lemonade, Lemon slice for garnish	 Pour vodka and blue curaçao into a shaker with ice.  Shake and strain into a highball glass with ice.  Top with lemonade.  Garnish with lemon slice.

Sour Cocktails	1. Whiskey Sour Ingredients: 60 ml bourbon, 30 ml lemon juice, 15 ml simple syrup, Cherry and orange slice for garnish	 Shake all ingredients with ice.  Strain into an old-fashioned glass.  Garnish with cherry and orange.
	2. Amaretto Sour Ingredients: 45 ml amaretto liqueur, 30 ml lemon juice, 15 ml simple syrup, Egg white (optional)	 Dry shake all ingredients (if using egg white).  Add ice and shake again.  Strain into a glass with ice.  Garnish with cherry or lemon.
	3. Daiquiri Ingredients: 60 ml white rum, 30 ml lime juice, 15 ml simple syrup	 Shake ingredients with ice.  Strain into a chilled cocktail glass.  No garnish or optional lime wheel
General Tips:  Use fresh ingredients for better taste and presentation.  Balance flavors between the alcohol base, sweeteners, and acidity.  Follow specific garnish techniques (e.g., citrus zest, herbs) to enhance aroma and appeal		



Activity 2: Guided Practice



Task 26:

You are working as a bartender at a luxury hotel, and you need to ensure that your cocktail ingredients are properly prepared to create high-quality drinks. The preparation includes washing, cutting, juicing, muddling, measuring, and garnishing.

1. Why is it important to thoroughly wash fresh ingredients, such as fruits, herbs, or vegetables, before using them in cocktails? Provide at least two reasons.
2. When cutting fruits like lemons, limes, or oranges for garnishes, why is it essential to maintain uniformity in slices or wedges? How does this impact the drink's appearance and flavor?
3. Which tools can you use for juicing citrus fruits effectively, and how does freshly squeezed juice enhance the taste of a cocktail compared to store-bought juice?
4. When muddling herbs like mint or basil for a cocktail, what technique should you use to release their essential oils without over-crushing them? Why is over-muddling undesirable?
5. How does precise measuring of ingredients (using jiggers or measuring cups) contribute to the consistency and balance of flavors in cocktails? What could happen if measurements are done inaccurately?
6. Practice cutting lime wedges and making a simple syrup.
7. Muddle some fresh mint with lime juice and prepare a non-alcoholic mojito to test your skills.
8. Reflect on what you learned and answer the above questions based on your experience.



Activity 3: Application



Task 27:

Scenario:

You are a bartender working in a popular cocktail bar. Your task is to prepare ingredients for five signature cocktails for an upcoming evening event. Each cocktail requires precision, creativity, and adherence to standard preparation techniques. Below are the cocktails and some specific instructions for their ingredients:

Margarita: Lime juice must be freshly squeezed and strained to remove pulp.

Mojito: Mint leaves need to be muddled gently to release their aroma without tearing.

Pina Colada: Coconut cream must be blended smoothly with pineapple juice.

Old Fashioned: Sugar cubes should be dissolved completely with bitters before adding ice.

Espresso Martini: Espresso needs to be freshly brewed and chilled before mixing.

1. Why is it important to strain lime juice for the Margarita, and how does this affect the drink's consistency?
2. What is the correct way to muddle mint leaves for the Mojito, and what happens if you muddle them too hard?
3. How can you ensure the coconut cream and pineapple juice are blended properly for a smooth Pina Colada?
4. Why is it crucial to dissolve sugar cubes with bitters before adding ice in an Old Fashioned, and how does it enhance the cocktail's flavor?

Topic 3.2: Production methods of advanced cocktails



Activity 1: Problem Solving



Task 28:

You are the manager of a high-end cocktail bar known for its creative and advanced cocktail menu. Recently, customer reviews have mentioned inconsistencies in the taste, presentation, and timing of the cocktails served. The bar staff is using different production methods for the same cocktails, leading to variability in quality. To address this, you need to standardize production methods while maintaining the creativity and flair of the bar's offerings.

1. How can you ensure that every bartender consistently follows the standardized recipe for each advanced cocktail while allowing room for creative flair?
2. What steps can be taken to reduce the time it takes to prepare advanced cocktails without compromising quality or presentation?
3. What type of training or workshops should be implemented to help bartenders master the standardized methods and innovative techniques for advanced cocktail production?
4. How can the bar ensure that customers perceive the standardization of production methods as an enhancement to their experience rather than a loss of the bar's uniqueness?
5. What system can be put in place to monitor adherence to the standardized methods and collect real-time feedback from both bartenders and customers to make continuous improvements?

Key Facts 3.2: Production methods of advanced cocktails⁹

The art of crafting advanced cocktails is a sophisticated process that blends creativity, technical skill, and precise adherence to recipes. Unlike basic cocktails, advanced cocktails require a nuanced understanding of ingredient proportions, preparation



techniques, and presentation.

The production of these drinks relies heavily on expert knowledge of flavor profiles, the use of innovative tools, and attention to detail to ensure consistency and quality.

- **Molecular Mixology Techniques**

Molecular mixology applies scientific principles to create unique textures, flavors, and presentations in cocktails.

- ✓ **Techniques:**

- ✚ **Specification:** Creates liquid-filled spheres resembling caviar, often using sodium alginate and calcium chloride.

- ✚ **Foams:** Made with lecithin or whipped cream chargers to add a light, airy topping.

- ✚ **Gels:** Thickened liquids made with agar-agar or gelatin for a textured twist.

- ✚ **Smoke Infusion:** Adds a smoky flavor using smoking guns or dry ice.

- ✚ **Carbonation:** Infuses cocktails with effervescence using CO₂ canisters.

- ✓ **Presentation:** Often emphasizes dramatic visuals, like edible cocktails or layered effects.

⁹ George, A. S. (2024). The Human Touch: Exploring the Synergy Between Bartenders and AI in Cocktail Creation. *Partners Universal Innovative Research Publication*, 2(2), 106-118.

Fat Washing

- Fat washing infuses cocktails with savory flavors by incorporating fats into spirits.

Process:

- **Combine:** Mix a melted fat (e.g., butter, bacon grease, or coconut oil) with a spirit.
- **Infuse:** Allow the mixture to sit for several hours at room temperature for flavor infusion.
- **Freeze:** Chill the mixture so the fat solidifies.
- **Filter:** Strain out the solidified fat, leaving behind the flavored spirit.

 **Clarification:** Clarification removes impurities from liquids, resulting in crystal-clear cocktails with a smooth texture.

Methods:

- **Milk Clarification:** Adding milk to an acidic mixture causes curdling. The curds trap particles and leave a clear liquid when strained.
 - **Gelatin Clarification:** Dissolve gelatin into the liquid, freeze it, and strain through a fine filter to remove particulates.
 - **Centrifugation:** Uses centrifugal force to separate solids and liquids, offering precise results.
- ✓ **Benefits:** Enhances presentation, smooths flavors, and ensures consistency.
 - ✓ **Applications:** Often used for punches or cocktails like clarified margaritas or piña coladas.
 - ✓ **Tools**

COCKTAIL SHAKERS

BOSTON



COBBLER



FRENCH/
PARISIAN



1. Cocktail shakers



2. Jiggers



3. Strainers



4. Bar spoons



Glassware



Activity 2: Guided Practice



Task 29:

Scenario:

You are working as a bartender at a high-end cocktail bar. Tonight, the head mixologist has assigned you the task of preparing five advanced cocktails, each using a different production method. Your focus is to ensure consistency, creativity, and precision while crafting the drinks. The cocktails you will make are:

- ✓ Smoked Old Fashioned (Smoking Technique)
 - ✓ Molecular Mojito (Spherification)
 - ✓ Classic Sour (Dry Shake Method)
 - ✓ Espresso Martini (Layering)
 - ✓ Spicy Margarita (Infusion)
1. What is the purpose of using a smoking technique in cocktails like the Smoked Old Fashioned, and how does it enhance the guest's experience?
 2. When using the specification technique for the Molecular Mojito, what are two key factors to ensure successful spheres?
 3. Why is the dry shake method crucial for cocktails like the Classic Sour, and what role does it play in the drink's texture and appearance?
 4. In an Espresso Martini, how would you achieve distinct layers when using the layering technique, and what principles of density are important to remember?
 5. If a customer requests a less spicy version of the Spicy Margarita, how would you modify the infusion process while maintaining the cocktail's overall balance?



Activity 3: Application



Task 30:

You are a bartender working in a popular cocktail bar. Your task is to prepare ingredients for five signature cocktails for an upcoming evening event. Each cocktail requires precision, creativity, and adherence to standard preparation techniques. Below are the cocktails and some specific instructions for their ingredients:

1. **Margarita:** Lime juice must be freshly squeezed and strained to remove pulp.
2. **Mojito:** Mint leaves need to be muddled gently to release their aroma without tearing.
3. **Pina Colada:** Coconut cream must be blended smoothly with pineapple juice.
4. **Old Fashioned:** Sugar cubes should be dissolved completely with bitters before adding ice.
5. **Espresso Martini:** Espresso needs to be freshly brewed and chilled before mixing.
 - ✓ Why is it important to strain lime juice for the Margarita, and how does this affect the drink's consistency?
 - ✓ What is the correct way to muddle mint leaves for the Mojito, and what happens if you muddle them too hard?
 - ✓ How can you ensure the coconut cream and pineapple juice are blended properly for a smooth Pina Colada?
 - ✓ Why is it crucial to dissolve sugar cubes with bitters before adding ice in an Old Fashioned, and how does it enhance the cocktail's flavor?
 - ✓ What are the benefits of using freshly brewed and chilled espresso in the Espresso Martini, and how does this contribute to its taste and texture?

Topic 3.3: Presentation techniques of cocktails



Activity 1: Problem Solving



Task 31:

Scenario:

You are a mixologist preparing for a cocktail-making competition at a high-end hotel bar. To impress the judges, you need to ensure that your ingredients are fresh, properly prepared, and creatively presented. You have a limited time to prepare, and you must carefully choose the preparation methods for different ingredients (e.g., fruits, herbs, syrups, and garnishes).

1. What factors should you consider when selecting fruits and herbs for your cocktails to ensure maximum freshness and flavor?
2. What are the best methods for preparing citrus fruits (e.g., lemons and limes) to extract juice efficiently while minimizing bitterness? How can you prepare a flavored simple syrup (e.g., mint or lavender) that balances sweetness and aroma without overpowering the cocktail?
3. What is the correct way to handle and muddle delicate herbs like mint or basil to release their essential oils without bruising or bittering them?
4. How can you creatively prepare and use garnishes to enhance the visual appeal and aromatic profile of your cocktails while staying practical for service?

Key Facts 3.3: Presentation Techniques for Cocktails.¹⁰

✓ Glassware Selection



The choice of glass influences the cocktail's appearance and appeal. Use appropriate glassware (e.g., martini glasses, highballs, rocks glasses) that complement the drink.

¹⁰ George, A. S. (2024). The Human Touch: Exploring the Synergy Between Bartenders and AI in Cocktail Creation. *Partners Universal Innovative Research Publication*, 2(2), 106-118.

✓ Garnishing



Add fresh and visually appealing garnishes such as citrus slices, mint sprigs, edible flowers, cherries, or cocktail umbrellas. Garnishes enhance both the flavor and the look.

✓ Layering and Color



Create visually stunning cocktails by layering ingredients of different densities. Use tools like bar spoons to carefully layer liquids.

✓ Rimming the Glass



Coat the rim with sugar, salt, or spices to complement the cocktail's flavor profile (e.g., salt for margaritas or sugar for fruity drinks).

✓ Use of Ice



Employ clear, clean, and uniquely shaped ice (e.g., spheres or cubes) to elevate the visual appeal while keeping the drink chilled.

✓ **Themed Presentation**



Incorporate themes, such as tropical setups with tiki mugs or elegant arrangements with gold-rimmed glasses, to match the occasion.

✓ **Smoke and Fog Effects**



Add drama using dry ice, smoke guns, or flavored vapor for an atmospheric presentation. Ensure safety measures are followed.

✓ **Edible Art and Inclusions**



Use edible glitter, fruit carvings, or infused edible items like lollipops or candies to make the drink interactive.

✓ **Color Coordination:** Pair the cocktail's colors with the garnish, glassware, and serving setup for a cohesive aesthetic.

✓ **Lighting and Accessories:** Serve cocktails under soft lighting or use illuminated glassware to create a unique ambiance. Add accessories like stirrers, paper straws, or fancy picks.

✓ **Serve at the Right Temperature:** Ensure the drink is served appropriately cold or warm to maintain the visual integrity (e.g., chilled for cold drinks to prevent condensation).

✓ **Incorporating Natural Elements:** Use eco-friendly or biodegradable materials for garnishes and straws to enhance appeal while being sustainable.

- ✓ **Attention to Detail:** Every element, from the cleanliness of the glass to the placement of garnishes, should be meticulous to achieve an overall polished presentation.
- **Tips for Successful Presentation:**
 - ✓ Prioritize freshness in ingredients.
 - ✓ Balance simplicity and creativity; avoid overloading the drink with elements.
 - ✓ Practice consistency for multiple servings of the same cocktail.



Activity 2: Guided Practice



Task 32:

You are conducting a training session for a group of hospitality students at a hotel's bar. The focus is on cocktail presentation techniques. The instructor demonstrates how to make a "Classic Mojito," emphasizing not just the preparation but also the presentation aspects, including garnish placement, glass choice, and the use of color contrast for visual appeal.

1. What role does glass choice play in cocktail presentation, and why is a tall glass preferred for a Classic Mojito?
2. Why is it important to muddle the mint leaves and lime wedges gently instead of crushing them completely?
3. What factors should be considered when garnishing a cocktail to ensure it is visually appealing and functional?
4. How does the amount of ice in the drink affect its presentation and taste? What techniques can you use to ensure a consistent and professional presentation of cocktails across multiple servings?



Activity 3: Application



Task 10:

Scenario:

You are a bartender at a luxury hotel bar. A high-profile guest, known for their love of artistic cocktails, orders a drink. They request something visually stunning and unique, as they are hosting a group of friends who are social media influencers. You decide to prepare a signature cocktail called the "Galaxy Martini," which features layers of vibrant colors, edible glitter, and smoke effects for added drama.

1. What techniques can you use to create a visually stunning and Instagram-worthy cocktail presentation while maintaining the drink's flavor profile?
2. How can you incorporate the story or theme of the "Galaxy Martini" into your presentation to enhance the guest's experience?
3. What tools or ingredients are essential for adding dramatic effects (e.g., edible glitter, smoke) to your cocktail presentation?
4. How would you ensure that the cocktail presentation aligns with the luxury brand image of your hotel?
5. What steps would you take to maintain efficiency and speed during preparation, especially when serving a group of guests?



Formative Assessment

The formative questions on presentation techniques of cocktails:

1. What are the essential elements of a well-presented cocktail?
2. How does the choice of glassware enhance the presentation of a cocktail?
3. What role do garnishes play in the visual appeal of a cocktail?
4. How would you use color and layering techniques to make a cocktail visually attractive?
5. Explain how you can balance aesthetics and practicality when presenting cocktails.
6. How would you modify the presentation of a cocktail for different customer preferences or themes?

7. Why is presentation important in enhancing the overall customer experience with cocktails?
8. Compare the presentation techniques of classic cocktails with modern or innovative ones. What are the key differences?
9. Design a new cocktail presentation for a tropical-themed party. What elements would you include, and why?
10. How can you incorporate cultural or regional themes into cocktail presentation techniques?
11. What are the challenges of maintaining consistency in cocktail presentation during peak service hours?
12. How would you assess whether a cocktail's presentation aligns with a hotel's branding or style?



Points to Remember

- A visually appealing cocktail creates a lasting impression.
- Use fresh and colorful garnishes such as citrus twists, fresh herbs, or edible flowers to enhance the aesthetic of the drink.
- Ensure that glassware complements the cocktail; for instance, martini glasses for classic martinis or tall Collins glasses for refreshing drinks.
- Consider rim decorations like sugar, salt, or crushed candies for added flair and flavor.
- Pay attention to proportions and layering for visual effects.
- Use techniques like floating layers, vibrant ice cubes, or misting aromatic sprays to engage multiple senses.
- The presentation can also include creative elements like themed drink umbrellas, reusable straws, or personalized glass etchings.
- Always serve cocktails at the correct temperature, whether chilled, warm, or with clear ice, to elevate the guest's experience.
- Use proper garnishes and glassware for presentation.
- Control the balance of flavors in complex cocktails.



Self-Reflection

Through the presentation techniques of cocktails, it becomes evident that the visual appeal of a drink is just as important as its taste in creating a memorable experience. Effective cocktail presentation involves the artful combination of garnishes, glassware, color contrast, and creativity to entice the senses and elevate the overall enjoyment. From the precise placement of a citrus twist to the dramatic use of smoke or edible flowers, each element contributes to the drink's aesthetic and thematic appeal. The art of presentation not only showcases the bartender's skill but also engages customers emotionally, setting the tone for a premium experience. Attention to detail and innovation in presentation can transform a simple cocktail into a statement piece, leaving a lasting impression on guests.

My experience	I do not have any experience doing this.	I know a little about this.	I have some experience doing this.	I have a lot of experience with this.	I am confident in my ability to do this.
Knowledge, skills, and attitudes					
Identify types of cocktail ingredients.					
Preparation of ingredients for cocktails based on recipe.					
Identify Production methods of advanced cocktails.					
Identify Presentation techniques of cocktails					

4. Fill in the table above and share results with the trainer for further guidance.

Areas of strength	Areas for improvement	Actions to be taken to improve
1.	1.	1.
2.	2.	2.
3.	3.	3.



Integrated/Summative assessment

Integrated situation

XX hotel is a 4-star hotel located in RUBAVU, has 50 delegates from XX. This group is having a cocktail party at the end of their workshop, where they are going to be served different drinks during the party. Among the drinks that are going to be served, there are 20 cappuccinos, 7 lattes, 8 flat white, 9 Kir- royale, and 6 Tequila sunrise. Note that the normal clients will also be allowed to attend and be served as always, However, this hotel does not have enough staff to prepare the above-mentioned orders. As well-trained staff in specialty coffee and cocktail preparation, you are hired to prepare the above orders within **3 hours**.

Resources

Equipment	Cleaning equipment, coffee grinder, working tables, French press, espresso machine, fridges, ice make machine, Steam Wand, Steam Pitcher, blender
Materials/ Consumables	Cleaning agents, cleaning materials, coffee beans, Tequila, milk, Wines, Juices, flavored syrups, tonic water, shrubs and bitters, Linen, champagne, Cloth or Towel
Tools	Coffee Cups, Glassware, spoons, pitchers, timer, thermometer, measuring tools, Mixing tools, Shakers, coasters, service trays, flasks, cleaning equipment, Coffee tamper, Portafilter, Tamper, Scale, hand blender

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