

**REPUBLIC OF KENYA**

**NATIONAL OCCUPATIONAL STANDARDS**

**FOR**

**BARISTA**

**KNQF LEVEL 3**

**ISCED PROGRAMME CODE: 1013 254 A**

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# FOREWORD

Provision of quality education and training is fundamental to the Government’s overall strategy for socio-economic development. Quality education and training contribute to achievement focused on Kenya’s development blueprint and sustainable development goals.

Reforms in the education and training sector are necessary for achievement of Kenya Vision 2030 and meeting the provisions the Constitution of Kenya. The education sector had to be aligned to the Constitution and this resulted in formulation of the Policy Framework for Reforming Education and Training (Sessional Paper No. 1 of 2019). A key feature of this policy is the change in the design and delivery of TVET training. This policy document requires that training in TVET be competency based, Occupational Standard development be industry led, certification be based on demonstration of competence and mode of delivery that allows for multiple entry and exit in TVET programs.

These reforms demand that Industry takes a leading role in Occupational Standard development to ensure the Occupational Standard addresses its competence needs. It is against this background that this Occupational Standard has been developed.

It is my conviction that this Occupational Standard will play a great role towards development of competent human resource for the Hospitality Sector’s growth and sustainable development.

# PREFACE

Kenya Vision 2030 aims to transform the country into a newly industrializing, middle-income country providing high quality life to all its citizens by the year 2030. Kenya intends to create a globally competitive and adaptive human resource base to meet requirements of a rapidly industrializing economy through life-long education and training. TVET has a responsibility of facilitating the process of inculcating knowledge, skills and worker behavior necessary for catapulting the nation to a globally competitive country, hence the paradigm shift to embrace Competency Based Education and Training (CBET).

The Technical and Vocational Education and Training Act No. 29 of 2013 and the Sessional Paper No. 1 of 2019 on Reforming Education and Training in Kenya, emphasized the need toreform Occupational Standard development, assessment and certification. This called for a shift to CBET to address the mismatch between skills acquired through training and skills needed by industry as well as increase the global competitiveness of Kenyan Labour force.

This Occupational Standard has been developed in adherence to the Kenya National Qualification Framework and CBETA standards and guidelines. The Occupational Standard is designed and organized into Units of Learning with Learning Outcomes; suggested delivery methods, training/learning resources and methods of assessing the trainee’s achievement. The Occupational Standard is competency-based and allows multiple entry and exit to the course.

I am grateful to the Council Members, Council Secretariat, NSSC, expert workers and all those who participated in the development of this curriculum.

# ACKNOWLEDGEMENT

This Occupational Standard has been designed for competency-based training and has independent units of learning that allow the trainee flexibility in entry and exit. In developing the curriculum, significant involvement and support was received from industry and various organizations.

I appreciate National Sector Skills Committee who enabled the development of this curriculum. I recognize with appreciation the role of the SSC in ensuring that competencies required by the industry are addressed in this curriculum.

I also thank all stakeholders in the hospitality sector for their valuable input and all those who participated in the process of developing this curriculum.

I am convinced that this Occupational Standard will go a long way in ensuring that workers in hospitality sector will acquire competencies that will enable them perform their work more efficiently.

# KEY TO UNIT CODE



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**OCCUPATIONAL STANDARDS OVERVIEW**

The Barista Level 3 Qualification consists of competencies required by a barista to prepare espresso, textured milk, serve coffee beverages and prepare smoothies, shakes and frappes. It combines theoretical knowledge and hands-on practical sessions to ensure that participants are equipped with skills needed to excel as baristas.

**Summary Of Units of Competency**

|  |  |
| --- | --- |
| **Unit Code** | **Units Title** |
| **1013 251 01A** | Prepare espresso |
| **1013 251 02A** | Prepare Textured milk |
| **1013 251 03A** | Serve coffee beverages |
| **1013 251 04A** | Prepare Smoothies, shakes, and frappes |

**CORE UNITS OF COMPETENCY**

**PREPARE ESPRESSO**

**UNIT CODE: 1013 251 01A**

**UNIT DESCRIPTION**

The unit describes the basic competencies required by an individual to set up, prepare the machine and equipment, dose, tamp coffee, and prepare espresso.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes that make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements that specify the required level of performance for each of the elements.  **Bold and italicized terms are elaborated in the Range** |
| --- | --- |
| * + - 1. Set up and prepare machine and equipment | * 1. Cups are pre-heated in accordance with enterprise standards.   2. **Portafilter** is wiped c**l**ean and dry before dosing.   3. **Grind of coffee** is checked.   4. Enough coffee is ground for the shot of espresso   5. Drip tray is cleaned and dried.   6. **Rags** are prepared and used properly. |
| * + - 1. Dose and Tamp Coffee | * 1. The **appropriate amount of ground coffee** is dosed in the portafilter.   2. **Appropriate amount of pressure** is applied to tamp the ground beans   3. **Ground coffee** is tamped evenly.   4. Portafiltersides and spouts are wiped and cleaned before inserting to the brew head  1. Spillage and wastage of ground beans are minimized during dosing and grinding. |
| * + - 1. Prepare espresso | * 1. Group head is flushed before inserting the portafilter   2. Portafilter is inserted and coffee is brewed immediately   3. **Volume** of espresso is checked   4. **Extraction time** of shot is monitored.   5. Crema of shot is inspected.   6. Espresso is served or used in a beverage immediately |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

| **Variable** | **Range** |
| --- | --- |
| * + - * 1. Grind of coffee | May include but not limited to:   * Course * Medium * Fine * Pulverized |
| * + - * 1. Rags | May include but not limited to:   * For portafilter basket * Steam wand * Drip tray * Cups |
| * + - * 1. Appropriate amount of ground coffee | May be between   * + 7-9 grams for single shot and 14-18 grams for a double shot |
| * + - * 1. Appropriate amount of pressure | * + May be between 30-50 lbs. pressure |
| * + - * 1. Portafilter | May include but not limited to:   * Single spout portafilter * Double spout portafilter * Blind portafilter |
| * + - * 1. Volume of espresso shot | Volume of a shot of espresso may be between   * + 85- 1.2 ounce (25-35ml) |
| * + - * 1. Extraction time | * + Extraction time of shots is between 20-30 seconds |

**Required Skills**

The individual needs to demonstrate the following skills:

* + Grinder calibration
  + Dosing and tamping
  + Extracting a perfect shot of espresso

**Required Knowledge**

The individual needs to demonstrate knowledge and understanding of:

* + Types of coffee grind
  + Types of commercially viable coffee beans
  + Roast levels
  + Espresso extraction
  + Parts of an espresso
  + Espresso machine parts

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate   * 1. Pre-heated cups before making the shot of espresso   2. Wiped the portafilter c**l**ean and dry before dosing   3. Dosed the correct amount and tamped coffee properly   4. Wiped and cleaned portafilter sides and spouts before inserting to the brew head   5. Flushed the group head before inserting the portafilter   6. Inserted portafilter and brewed coffee immediately   7. Checked volume of espresso   8. Monitored extraction time of shot.   9. Inspected the crema of the espresso.   10. Served or used the espresso immediately |
| 1. Resource Implications | The following resources MUST be provided:   * 1. Commercial espresso machine   2. Institutional coffee grinder   3. Coffee beans   4. Coffee bar tools and supplies (tamper, brush etc.) |
| 1. Method of Assessment | Competency may be assessed through:   1. Practical 2. Projects 3. Written test 4. Portfolio of evidence 5. Oral test |
| 1. Context for Assessment | Assessment may be done in the workplace or in a simulated workplace setting (assessment centers). |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# PREPARE TEXTURED MILK

**UNIT CODE: 1013 251 02A**

**UNIT DESCRIPTION**

The unit describes the basic competencies required by a barista to prepare milk and equipment, foam milk and steam milk.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes that make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements that specify the required level of performance for each of the elements.  **Bold and italicized terms are elaborated in the Range** |
| --- | --- |
| * + - 1. Prepare milk and equipment | * 1. Milk is chilled in accordance to appropriate temperature.   2. Adequate amount of milk is measured according to the kind of drink to be prepared.   3. Correct (size of) **steaming pitcher** is **selected** in accordance with enterprise standards   4. Steaming pitcher is chilled in accordance to appropriate temperature.   5. Steam wand is flushed to remove condensed water.   6. Steam wand is wiped before steaming.   7. Rags for the steam wand are kept clean and moist |
| * + - 1. Foam milk | * 1. Steam wand is positioned at the right depth of the milk.   2. Full steam is applied when introducing air into the milk.   3. The sound of air being drawn into the milk is evaluated through the hissing sound.   4. Milk is stretched according to the desired **volume of foam.**   5. Milk is converted into micro foam. |
| * + - 1. Steam milk | * 1. Steam wand is angled as appropriate to create a whirlpool effect.   2. Milk is spun to achieve the desired **consistency**.   3. Milk is steamed at the **ideal temperature** for immediate consumption.   4. Steam wand is shut off some 5 degrees before the desired temperature.   5. Steam wand is flushed and wiped after steaming.   3.6 Big bubbles are removed by swirling and knocking the pitcher on the counter. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

| **Variable** | **Range** |
| --- | --- |
| 1. Steaming pitcher | Size may include: to mls   * 10 oz * 12 oz * 20 oz * 32 oz |
| 2. Selection factors | May include but not limited to:   * Amount of milk * Steam pressure/steam capacity of machine * Steam wand tip |
| 3. Desired volume of foam | Volume of milk would have expanded to about:   * 1/3 of original volume for latte and * Doubled for cappuccino |
| 4. Desired consistency | * Silky * Velvety * Pouring consistency * Naturally sweet * Glossy * Micro foam bubbles |
| 5. Ideal temperature | * + Ideal temperature for steaming milk is between 140 to 160 degrees Fahrenheit |
| 1. Steaming pitcher | Size may include:   * 10 oz * 12 oz * 20 oz * 32 oz |

**Required Skills**

The individual needs to demonstrate the following skills:

* Milk texturing and steaming

**Required Knowledge**

The individual needs to demonstrate knowledge and understanding of:

* + Milk types and Chemistry of milk
  + Espresso machine parts
  + Milk based coffee beverages

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| 1. Critical aspects of competency | Assessment requires evidence that the candidate.   * 1. Measured the adequate amount of milk according to the kind of drink to be prepared.   2. Used chilled milk.   3. Selected the correct size of steaming pitcher   4. Flushed and wiped the steam wand before and after steaming milk   5. Kept rags clean and moist.   6. Listened to the sound of air being drawn into the milk.   7. Stretched the milk according to the desired volume of foam.   8. Steamed the milk to its desired texture   9. Steamed the milk at the ideal temperature. |
| 1. Resource Implications | The following resources MUST be provided:   * 1. Commercial espresso machine   2. Institutional coffee grinder   3. Coffee beans   4. Coffee bar tools and supplies (tamper, steaming pitcher etc.)   5. Milk   6. Chiller/ref or ice box with ice |
| 1. Method of Assessment | Competency may be assessed through:   1. Practical 2. Projects 3. Written test 4. Portfolio of evidence 5. Oral test |
| 1. Context for Assessment | Assessment may be done in the workplace or in a simulated workplace setting (assessment centers). |
| 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# SERVE COFFEE BEVERAGES

**UNIT CODE: 1013 251 03A**

**UNIT DESCRIPTION**

This unit describes the basic competencies required by an individual in order to take guests orders, prepare espresso- based beverages and serve brewed coffee.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes that make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements that specify the required level of performance for each of the elements.  **Bold and italicized terms are elaborated in the Range** |
| --- | --- |
| * + - 1. Take guests' orders | 1. Orders are taken and verified with guests or dining service crew.    1. Recommendations are offered to the guest on selection of coffee beverages.   1.2 **General information about the coffee beans** are provided to guests  **1.3 Miss-en-place** for coffee serviceis completed according to establishment’s standards and procedures. |
| * + - 1. Prepare espresso- based beverages | * 1. **Hot and cold espresso-based beverages** are prepared according to standard recipes of the establishments.   2. Only **good/perfect shots of espresso** are served or used in the beverages.   3. Appropriate **cups/glasses** and accessories are selected according to the beverage ordered. |
| 3. Serve brewed coffee | * 1. Brewed coffee is prepared according to the **brewing method** desired by the guest.   2. Coffee is brewed according to ideal brewing time of the method   3. Coffee beans are weighed or measured according to brewing method.   4. Brewed coffee is served immediately. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| 1. Coffee beans information | May include but not limited to:   * Variety * Origin * Coffee Blend * Roast level * Coffee grind |
| 1. Mis-en-place | May include but not limited to:   * Preparing machine or brewing equipment * Setting cups, saucers, accessories * Supplies/condiments |
| 1. Hot and cold espresso- based beverages | May include but not limited to:  **Hot**   * Espresso * Americano * Cappuccino * Café Latte * Café Mocha   **Cold**   * Mocha Frappe * Ice Café Latte * Iced Café Mocha |
| 1. Perfect shot of espresso | * Espresso shot within the parameters: * Amount of ground coffee: Between 7-9 grams * Volume: Between 25-35 ml * Water temperature: Between 195-205 degrees F * Atmospheric pressure: Between 9-10 bars * Extraction time: 20-30 seconds |
| 1. Coffee cups/glasses | May include but not limited to:   * Espresso cups/demitasse * Cappuccino cups * Latte cups * Irish glass * Parfait |
| 1. Brewing method | May include but not limited to:   * French Press/Plunger * Syphon * Pour over |

**Required Skills**

The individual needs to demonstrate the following skills:

* + Extracting espresso
  + Brewing coffee
  + Service of coffee beverages

**Required Knowledge**

The individual needs to demonstrate knowledge and understanding of:

* + Coffee growing countries
  + Coffee varieties
  + Basic espresso beverages
  + Brewing methods
  + Knowledge of service of coffee beverages

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| * + 1. Critical aspects of competency | Assessment requires evidence that the candidate:   * 1. Provided general information about the coffee beans to the guest   2. Prepared hot and cold espresso-based beverages   3. Served beverages immediately   4. Brewed coffee with the used of the different brewing methods |
| * + 1. Resource Implications | The following resources MUST be provided:   * 1. Commercial espresso machine   2. Institutional coffee grinder   3. Coffee beans   4. Coffee bar tools and supplies   5. Milk   6. Brewing equipment |
| * + 1. Method of Assessment | Competency may be assessed through:   1. Practical 2. Projects 3. Written test 4. Portfolio of evidence 5. Oral test |
| * + 1. Context for Assessment | Assessment may be done in the workplace or in a simulated workplace setting (assessment centers). |
| * + 1. Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |

# PREPARE SMOOTHIES, SHAKES AND FRAPPES

**UNIT CODE: 1013 251 04A**

**UNIT DESCRIPTION**

The unit describes the basic competencies required by a barista to prepare smoothies, shakes and frappes.

**ELEMENTS AND PERFORMANCE CRITERIA**

| **ELEMENT**  These describe the key outcomes that make up workplace function | **PERFORMANCE CRITERIA**  These are assessable statements that specify the required level of performance for each of the elements.  **Bold and italicized terms are elaborated in the Range** |
| --- | --- |
| 1.Prepare smoothie | 1. Fresh fruits are selected. 2. 3, 4 pieces of fresh fruits slices are put into the blender. 3. 2-3 scoops of curd are added into the blender. 4. 20-30 ml sugar syrup is added into the blender. 5. 4-5 pieces of iced cube are added into the blender. 6. 45 ml milk is added into the blender. 7. All ingredients are blended. 8. The mixture is poured back into serving cup. 9. The mixture is topped up with whipped cream. 10. **Garnish/ decoration** is added to improve presentation. 11. The **smoothie** is served using the standard service procedure. |
| 1. Prepare Milkshakes | 1. **Stabilizer** /Ice cream is added to the blender. 2. Milk is added to the blender. 3. The mixture is blended until smooth. 4. The mixture is poured into a cup and garnished with whipped cream. 5. Sprinkles are added. 6. Cherries/ garnishes/ decorations are added as desired. |
| 1. Prepare frappes | 1. Stabilizers- Ice, cold espresso, milk, and sugar are combined in a blender. 2. The mixture blended on low speed and the speed slowly increased. 3. The mixture blended on high speed for 30 seconds or until smooth.   3.4 The mixture is divided into two glasses, topped with whipped cream, and served immediately. |

**RANGE**

This section provides work environments and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

|  |  |
| --- | --- |
| **Variable** | **Range** |
| Fruits may include but not limited to: | * + Banana   + Mango   + Avocado   + Strawberries |
| Garnish may include but not limited to: | * + Sauces   + Whipped cream   + Strawberries   + Cherries   + Slices of lemons, oranges   + Sprinkles |
| Smoothies mayinclude but not limited to: | * + Banana   + Mango   + Avocado   + Strawberries   + Mixed fruit |

**Required Skills**

The individual needs to demonstrate the following skills:

* Coffee shop tools and equipment selection and their use
* Ingredients for making beverages
* Presentation techniques
* Technical skills e.g. mixing, chilling, blending, whisking,
* Garnishing and decorating
* Cleaning methods (scrubbing, cleaning with cold/warm water)
* Use of other working tools and equipment
* Creativity/Innovation
* Hygiene (personal grooming, coffee shop and beverage hygiene)
* Communication.
* Interpersonal relations.

**Required Knowledge**

The individual needs to demonstrate knowledge and understanding of:

* Work place procedures
* Preserving beverages
* Emerging trends
* Time management
* Efficient workflow
* Culture and religion (kosher, halal, vegans)
* Special needs
* Beverage product knowledge
* Quality control
* Portion control
* Syrup, flavourings and their substitutes
* Allergens (gluten free & nut allergy, milk intolerance)
* Garbage management
* Beverage trends (organic products, molecular gastronomy)
* Professional ethics
* Ingredients for beverages

**EVIDENCE GUIDE**

This provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge and range.

|  |  |
| --- | --- |
| * Critical aspects of competency | * 1. Fresh fruits are selected.   2. 3, 4 pieces of fresh fruits slices are put into the blender.   3. 2-3 scoops of curd are added into the blender.   4. 20-30 ml sugar syrup is added into the blender.   5. 4-5 pieces of iced cube are added into the blender.   6. The mixture is poured back into serving cup.   7. The mixture is topped up with whipped cream.   8. Garnish is added to improve presentation.   9. The smoothie is served using the standard service procedure.   10. Ice cream is added to the blender.   11. Milk is added to the blender.   12. The mixture is poured into a cup and garnished with whipped cream.   13. Sprinkles are added.   14. Garnishes /decorations are added as desired.   15. Ice, cold espresso, milk, and sugar are combined in a blender.   16. The mixture blended on low speed and the speed slowly increased.   17. The mixture blended on high speed for 30 seconds or until smooth.   18. The mixture is divided into two glasses, topped with whipped cream, and served immediately. |
| * Resource Implications | The following resources MUST be provided:   1. Fully equipped safe coffee shop 2. Proper working equipment 3. Working environment that meets OSHA standards 4. A variety of beverage ingredients |
| * Method of Assessment | Competency may be assessed through:   1. Practical 2. Projects 3. Written test 4. Portfolio of evidence 5. Oral test |
| * Context for Assessment | Assessment may be done in the workplace or in a simulated workplace setting (assessment centers). |
| * Guidance information for assessment | Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended. |