

BARISTA SKILLS

Barista skills

FOUNDATION | INTERMEDIATE | PROFESSIONAL



BARISTA SKILLS

Barista skills

FOUNDATION





LEVEL: FOUNDATION

OVERVIEW: DESIGNED TO INTRODUCE CORE BARISTA SKILLS TO PEOPLE WITH NO PREVIOUS BARISTA EXPERIENCE. SUCCESSFUL CANDIDATES SHOULD BE ABLE TO SIMPLY CALIBRATE THEIR GRINDERS AND MAKE AN ESPRESSO AND CAPPUCCINO TO CORE STANDARDS. COURSE LENGTH IS ESTIMATED AT 1/2 - 1 DAY.

Introduction to Coffee is a recommended (but not mandatory) pre-requisite module. All knowledge and skill from these modules will be assumed as being held and may be tested through the practical and/or written assessments.

CODE/ MODULE	SUB CODE	KNOWLEDGE/SKILL REQUIRED	STANDARDS
1.01 COFFEE BEANS	1.01.01	Understanding of the key flavours differences between Arabica & Robusta.	Recognises Arabica from Robusta in blind tasting (as tested in Introduction to Coffee Module).
	1.01.02	Understanding of the importance using fresh coffee beans and how to keep them fresh.	Uses a sealed bag, ideally within one month after roasting; maximum 3 months. Uses beans immediately after grinding. Minimises time in the hopper. Keeps lids on the bean hopper and doser chamber.
	1.01.03	Understanding of how to store coffee to minimize deterioration.	Stores beans away from air, moisture, light and temperature extremes at all times.
1.02 WORKSPACE MANAGEMENT	1.02.01	Understanding of the importance of maintaining a hygienic and organised workspace.	Always keeps workspace clean, tidy and organised.
1.03 GRINDING, DOSING AND TAMPING	1.03.1	Identification and naming of parts of main parts of a grinder.	Uses correct terminology: bean hopper, grind adjustment, dosing chamber and dosing lever (if applicable), dose adjustment, hopper gate.
	1.03.2	Basic understanding of how dose affects shot times (Too small/underdosed leads to faster shot times and too large/overdosed leads to slower shot times.).	Recognises when the dose is incorrect (too small or too large).
	1.03.3	Demonstration of good dosing technique – to keep dose consistent from one espresso to the next.	Uses the correct dosing action – to dose consistently with minimal spillage.
	1.03.4	Demonstration of dose calibration – using either a grinder with a dosing chamber OR "on demand" grinder. (traditionally 7grams for a single and 14 grams for a double; but now commonly 'updosed') Aiming for an extraction time of 20-30 seconds.	Adjusts volumetric OR time-based dose controls to produce an espresso within 20-30 seconds.
	1.03.5	Demonstration of initial grind calibration – using a grinder with a dosing chamber OR an 'on-demand' grinder.	Calibrates grind within 15 minutes to produce and espresso in 20-30 seconds – with a subsequent minor adjustment (as requested), made within 10 minutes.
	1.03.6	Basic understanding of how the grind affects shot times (given that the dose has already been calibrated and dosing is consistent).	Recognises when the grind is incorrect (too coarse or too fine) and corrects it to produce an espresso in 20-30 seconds.
	1.03.7	Understanding of when micro-adjustments to the grind are needed.	Makes micro-adjustments to the grind due to environmental conditions (temperature of grinder and surroundings, humidity levels, condition of the burrs, freshness of beans etc.).
	1.03.8	Demonstration of good technique for evenly distributing the dose in preparation for tamping.	Techniques for evenly distributing ground coffee over the filter is evidenced.
	1.03.9	Demonstration of good tamping technique using a hand tamp.	Holds tamp correctly to produce a flat and even surface on the tamped cake – and to reduce repetitive strain injuries.



LEVEL: FOUNDATION

CODE/ MODULE	SUB CODE	KNOWLEDGE/SKILL REQUIRED	STANDARDS
1.04 EXTRACTION & BREWING	1.04.1	Identification and naming of main parts of an espresso machine. Understanding of how to turn the espresso machine on and prepare it for use.	Uses correct terminology: group head, group handle, filter basket, shower, seal, steam wand, steam nozzle on-off controls (steam, extraction, hot water), gauges (pressure, temperature, water level), drip tray, cup warmer. Checks that boiler pressure is up to 1 bar before use. Warms group handles and seasons groups Stacks cups on cup warmer; stacks saucers and spoons etc. next to the espresso machine.
	1.04.2	Demonstration of steps for preparing espresso.	Dry wipes filter basket before dosing. Has acceptable spillage/waste when dosing and grinding. Uses consistent and effective dosing, distribution and tamping (consistent dosing, well distributed to avoid channeling, flat tamp without tapping filter). Cleans rim of filter before inserting. Flushes group head before attaching portafilter. Immediately brews when portafilter inserted.
	1.04.3	Understanding of basic sensory qualities of under-extracted espresso (thin body, unbalanced flavour with high acidity, poor crema), over-extracted espresso (unbalanced flavour with high bitterness, poor crema) and a good espresso (good body round and smooth, well balanced flavour (acidity, sweetness, bitterness), good visual crema (in line with coffee used) (It is expected that students will control this by aiming extraction time at 20-30 seconds, at this level)	Recognises differences between under-extraction, over-extraction and good extraction.
	1.04.4	Demonstration of good technique for making a micro-adjustment to the grind to improve the quality of poorly extracted espresso – aiming for an extraction time of 20-30 seconds, at this stage.	Extracts espresso in 20 - 30 seconds. Visual look of the espresso is consistent to desired standards.
1.05 MILK TECHNIQUES	1.05.1	Understanding of the importance of freshness of milk.	Uses fresh milk to maintain foam quality. Discards older or "off" milk.
	1.05.2	Understanding of why it is important to use milk hygienically.	Minimises time milk is left out of the refrigerator, rotate stock, empties and cleans jug before use, and milk is never re-foamed.
	1.05.3	Demonstration of techniques required to produce correct milk texture (micro-foam).	Produces milk with consistently dense texture, with no visible bubbles and a shiny surface. (See CDS Foam Quality Guide).
	1.05.4	Demonstration of good techniques for producing the correct milk temperature.	Desirable range 55c-65c (Maximum temperature 70c, Minimum of 50c).
	1.05.5	Demonstration of efficient steps when foaming milk.	Empty and clean jug before use Purges steam wand before foaming Wipes steam wand after use Purges steam wand after wiping Minimise milk waste.
	1.05.6	Understands the pouring techniques required to produce a cappuccino and caffe latte.	Can pour drinks to the required composition and visual requirements.
1.06 BARISTA MENU	1.06.1	Demonstration of good techniques for preparing and serving an espresso.	Prepares an espresso to the desired size, taste and visual parameters (as per CDS drink definitions) .



LEVEL: FOUNDATION

CODE/ MODULE	SUB CODE	KNOWLEDGE/SKILL REQUIRED	STANDARDS
		Demonstration of good techniques for preparing and serving a cappuccino	Prepares a cappuccino to the desired size, taste and visual parameters (as per CDS drink definitions)
1.07 HYGIENE, HEALTH & SAFETY	1.07.1	Basic understanding of the local laws that apply to safety and hygiene when using espresso equipment and cleaning chemicals.	Minimises risks related to safety and hygiene according to local laws. (cleans outside of steam wand – every time immediately after use).
	1.07.2	Demonstration of safe and hygienic work practices when preparing and serving espresso beverages	Washes hands and rinses wipes regularly. (purges inside of steam wand – every time immediately after use). Keeps body and clothing (including apron) clean and hygienic. Uses and cleans machines safely – according to manufacturer's instructions and local laws. Uses cleaning chemicals safely – according to manufacturer's instructions and local laws. Serves drinks safely and hygienically (Avoiding handling lip of the cup; aware of dangers of hot liquids/spillages)
1.08 CUSTOMER SERVICE	1.08.1	Not required at this level.	(has acceptable milk waste after pouring).
1.09 CLEANING, MAINTENANCE & TROUBLE- SHOOTING	1.09.1	Understanding of the importance of regular (at least daily) cleaning of the grinder and espresso machine Understanding of the importance of keeping the steam wand clean	Cleans the grinder and espresso machine as required. Purges the steam wand before each use and cleans it after each use.
	1.09.2	Demonstration of good techniques for daily cleaning of a grinder	Washes and dries the bean hopper. Empties the doser chamber and brushes out all excess ground coffee beans thoroughly. Wipes splashes and spills on outside of grinder.
	1.09.3	Demonstration of good techniques for daily cleaning of an espresso machine	Back flushes the espresso machine at least once a day. Brushes and cleans group heads of all excess coffee beans and oils. Flushes and cleans steam wands (never soaks them). Removes and cleans drip tray. Wipes splashes and spills on outside of espresso machine.
1.10 FINANCIAL MANAGEMENT	1.10.1	Not required at this level	



LEVEL: PROFESSIONAL

OVERVIEW: DESIGNED TO TEST ADVANCED SKILLS AND DETAILED KNOWLEDGE OF THE SCIENCE BEHIND PROCESSES USED, EXPECTED FROM A PROFESSIONAL BARISTA (FOR EXAMPLE, FROM SOMEONE WORKING AS A BARISTA FOR 12 MONTHS OR MORE, WITH SOME MANAGEMENT RESPONSIBILITIES). SUCCESSFUL CANDIDATES SHOULD HAVE A DETAILED UNDERSTANDING OF THEIR INGREDIENTS AND OF THE TECHNIQUES AVAILABLE TO MAXIMISE THE QUALITY OF THE DRINKS MADE. THEY SHOULD BE ABLE TO MANAGE THE SKILLS OF OTHERS TO PRODUCE QUALITY DRINKS AND PROVIDE EXCELLENT CUSTOMER SERVICE. THEY SHOULD BE ABLE TO MAINTAIN THEIR EQUIPMENT TO ENSURE CONTINUED QUALITY. COURSE LENGTH IS ESTIMATED AT 2 - 3 DAYS.

Introduction to Coffee, Barista Foundation, and Intermediate Brewing and Grinding are recommended (but not mandatory) pre-requisite modules. Holding the Intermediate Barista Certification is a mandatory requirement. All knowledge and skill from these modules will be assumed as being held and may be tested through the practical and/or written assessments.

BLOOMS TAXONOMY: Applying / Analyzing / Evaluating

Recommended reading:

CODE/MODULE	SUB CODE	KNOWLEDGE/SKILL REQUIRED	STANDARDS
3.01 COFFEE BEANS	3.01.1	Awareness of the components of blend/single origin of coffee used (variety/origin/process).	Can describe beans/blend in terms of their variety, origin and processing method used.
	3.01.2	Awareness of roast colour/degree, of coffee used (light, medium, dark).	Can describe beans/blends in terms of their roast degree.
	3.01.3	Understanding of what various beans/blend components contribute to flavour and mouthfeel.	Can explain the flavours delivered by the variety, origin, processing and roast, of the bean/s being used Can describe a blend of their own in terms of beans variety, origin, processing and roast and the desired flavour and mouthfeel this would achieve.
	3.01.4	Understanding of how changes in brewing parameters affect flavour from differing varieties, origins, processes and roasts.	Adapts brewing parameters (dose, grind texture, water quantity, water temperature, pressure (if machine allows)) to achieve desired flavour and body.
	3.01.5	Understanding of the various decaffeination processes.	Offers correct advice to customers on the various decaffeination processes.
	3.01.6	Understanding of how freshness affects the extraction process and espresso flavor.	Can distinguish coffee that is too fresh or stale by visual clues during its extraction, and flavour. Uses techniques to maintain freshness and achieve desired flavour in beans/blends. Uses techniques to maintain freshness in slow-selling beans/blends (guest blends, single origins, decaffeinated).
	3.01.7	Understanding of how different packaging methods affect freshness.	Selects packaging that maximises self life.
	3.01.8	Awareness of how climatic condition and environmental condition affect freshness.	Stores away from extremes of heat and cold.
3.02 WORKSPACE MANAGEMENT	3.02.1	Analysis of café layout - to ensure speed and efficiency, good workflow and smooth customer traffic.	Identifies problems with café layout. Adjusts café layout to correct problems related to speed, efficiency, workflow and customer traffic.
3.03 GRINDING, DOSING AND TAMPING	3.03.1	Evaluation of various grinder features – including motor speed, size and types of burrs (flat or conical), grind distribution, degree of static and waste, construction, ease of use (for grinders with a dosing chamber and on-demand grinders).	Selects grinder based on advantages and disadvantages related to the needs of the situation it will be used for.
	3.03.2	Evaluation of features of flat and conical burrs from a scientific perspective (motor speed, particle size, heat dispersion, burr replacement).	Selects type of burrs based on advantages and disadvantages related to the needs of the situation they will be used for.



READING LIST

TITLE	AUTHOR	FORMAT
FOUNDATION:		
Barista Bible	Christine Cottrell	Book
The Ultimate Coffee Book for Beginners & Professionals	Johanna Wechselberger, Tobias Hierl	Book
Coffee with Tim Wendelboe	Tim Wendelboe	Book
Coffee: Beans, barista & latte art	Coffee Community	iPad app
Espresso Quest	Instaurator	Book
INTERMEDIATE:		
The Professional Barista's Handbook	Scott Rao	Book
The Espresso Coffee Production System	Franco E Mauro Bazzara	Book
The Coffee Tasting Book	Franco E Mauro Bazzara	Book
Coffee Basics Posters	Kaffe Konsulat	Posters
Espresso Quest	Instaurator	Book
PROFESSIONAL:		
Espresso Coffee: The Science of Quality	Andrea Illy & Rinantonio Viani	Book
The Coffee Brewing Handbook	Ted Lingle	Book
The Coffee Cupper's Handbook	Ted Lingle	Book
McGee on Food & Cooking	Harold McGee	Book
Some Aspects of Espresso Extraction	Jim Schulman	Article/on-line





BARISTA FOAM STANDARDS

MILKING STANDARD	PICTURE REFERENCE	DESCRIPTION
<p>LEVEL 1: Excellent milk standard</p>		<p>Microfoam produced smooth shiny and moist. No visible bubbles.</p>
<p>LEVEL 2: Very good milk standard</p>		<p>Microfoam produced smooth and moist. Very few small bubbles <0.5mm diameter.</p>
<p>LEVEL 3: Acceptable milk standard (Minimum acceptable to pass Foundation requirements)</p>		<p>Microfoam produced smooth and moist. Microfoam texture with many small (<1mm diameter) and very few larger (1-2mm diameter) bubbles.</p>
<p>LEVEL 4: Unacceptable milk standard (Failing requirement for Foundation level)</p>		<p>Many large (>1mm + diameter) bubbles present. Texture uneven/dull/dry.</p>
<p>LEVEL 5: Very poor milk standard (Failing requirement for Foundation level)</p>		<p>Many large (>1mm + diameter) bubbles present. Very dry and uneven looking like it has been placed on by spoon/spatula rather than poured</p>



LATTE ART STANDARDS

LATTE ART STANDARD	EXCELLENT STANDARD	REASONABLE STANDARD	UNACCEPTABLE STANDARD
Contrast	<ul style="list-style-type: none"> • Sharp contrast between clean white foam of the pattern against the rich colour of the cr�ma. (Cr�ma colour may vary based on coffee used). • This sharp contrast should be demonstrated throughout the majority of the pattern to be considered excellent. 	<ul style="list-style-type: none"> • The pattern can be clearly identified but there is a degree of "marbling" between the white foam and the brown cr�ma. • There are areas of "beige" where the cr�ma and foam have mixed 	<ul style="list-style-type: none"> • Contrast is generally poor so that the pattern is hard to distinguish. • Much mixing of the white foam into the cr�ma.
Harmony, size and position in cup	<ul style="list-style-type: none"> • For right-handed drinkers the pattern should ideally be presented with its base at 6 o'clock (tolerance between 5-7 o'clock) and the handle at 3 o'clock. • The size of the pattern should suit the size of the top of the cup, big enough to fill the space while still leaving space to the edges to "frame" the design. • If multiple patterns are poured in the cup then they should be positioned in a complementary manner to each other, giving an overall attractive design. 	<ul style="list-style-type: none"> • For right-handed drinkers the pattern is presented with its base between 4-8 o'clock • The size of the pattern is considered slightly too small for the space available. • The size of the pattern is too big for the cup and loses its "frame" of cr�ma. • The pattern is poorly positioned in the cup e.g. to one side of the cup or touching the side/top/base. • Multiple patterns are unbalanced in their size or quality, but still clearly identifiable. 	<ul style="list-style-type: none"> • For a right-handed drinker the pattern is poured upside down when the handle is positioned at 3 o'clock.
Symmetry of pattern (if required)	<ul style="list-style-type: none"> • Key free pour patterns such as hearts, rosettas and tulips need to have good symmetry to be considered excellent. The pattern should be a good mirror image if cut down the middle. • "Absolute" symmetry is not assessed, e.g. in each leaf of a rosetta, but symmetry in the overall shape of the pattern. 	<ul style="list-style-type: none"> • Symmetry of the pattern is fair but not considered excellent 	<ul style="list-style-type: none"> • Symmetry is considered poor. • Pattern is hard to distinguish and so symmetry is difficult to assess.
Foam quality	<ul style="list-style-type: none"> • CDS Foam Quality Level 1-2 	<ul style="list-style-type: none"> • CDS Foam Quality Level 3-4 	<ul style="list-style-type: none"> • CDS Foam Quality Level 5-6
Identification of pattern	<ul style="list-style-type: none"> • Pattern is clearly identified and attractive 	<ul style="list-style-type: none"> • Pattern is clearly identified 	<ul style="list-style-type: none"> • Pattern is not clearly identified