

Cicerone® Certification Program

UK Certified Beer Server Syllabus

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This syllabus outlines the knowledge required of those preparing for the Certified Beer Server exam in the United Kingdom. While this list is comprehensive in its scope of content, further study beyond the syllabus is necessary to fully understand each topic. The content tested on the Certified Beer Server exam is a subset of the information presented within the Master Cicerone® Syllabus, and individual syllabi for all four levels of the program may be found on the cicerone.org website.

Outline

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IV. Beer Ingredients and Brewing Processes

- A. Ingredients

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Full Syllabus

I. Keeping and Serving Beer

- A. Purchasing and accepting beer
 1. Assessing beer shipment age
 - a. Product Freshness
 - i. All beer packages in the UK are required to have a clearly stated best before date
 - ii. Check to ensure there is adequate time to sell the product before expiration
- B. Serving alcohol
 1. Alcohol's effects
 - a. Absorption and elimination
 - b. Physical and behavioural indicators
 2. Responsible serving practices
 - a. Provide accurate ABV information to consumers at point of dispense
 - b. Select appropriate serving size based on ABV
- C. Beer storage
 1. Beer is best consumed fresh
 - a. A very few strong or intensely flavoured beers may age in ways that make them interesting to drink months or years later if properly cellared
 2. Rotate inventory
 - a. Ensure that beer is consumed in the order of dating
 - b. Remove out of date products from service inventory
 - c. Train staff to encourage/sell/promote all beers offered
 3. Store beer properly
 - a. Ideally, all beer should go into the beer cellar or other temperature-controlled storage
 - b. Cask ales must be stored in controlled temperature environment which is kept at 11-13° C, typically the beer cellar
 - c. Non-refrigerated storage accelerates aging and development of off flavours
 - With time, all beers will develop signs of oxidation (papery, wet cardboard flavours)
 - d. Cellar should be regularly cleaned and maintained to prevent development of off flavours, particularly in cask beer
 - e. Clear and green bottle beers are subject to becoming light struck
 - Caused by sunlight or fluorescent light
 - Most noticeable in the aroma of the beer
 - Brown glass blocks 98% of the wavelengths of light that cause this, and therefore offers superior protection to clear and green glass
 - Green and clear glass offer little or no protection against this
 - Light struck aroma may be evident after a few minutes of light exposure
 - Cans, ceramic bottles, and bottles in closed case boxes that completely shield beer from light give maximum protection
 4. Serve beer properly
 - a. Draught beer must be served using CO₂ or a CO₂-nitrogen mix at the proper pressure setting as specified by the brewer/brand owner

- b. Compressed air should never be used to pressurize traditional kegs
- D. Draught systems
 1. Key elements
 - a. Keg
 - b. Cask
 - c. Coupler
 - d. FOB (Foam-on-beer) monitors/detectors
 - e. Beer tap (faucet)
 - i. Free Flow Tap
 - The nozzle for a nitro (stout) tap is different than the nozzle for an ale tap
 2. Draught system operation
 - a. Standard cellar and system temperature of 11-13 °C¹
 - b. All kegs should be in the beer cellar for 24 hours prior to service to prevent foaming
 - c. Gas pressure applied to keg should only be set or adjusted by a draught-trained professional
 3. Basic troubleshooting
 - a. Beer has been in the beer cellar for 24 hours
 - b. Coupler is properly engaged
 - c. No kinks or pinches in hose from coupler to wall
 - d. FOB, if present, properly set for service
 - e. If beer is still pouring badly, contact a draught-trained professional for assistance
 4. Draught system maintenance
 - a. Draught systems need to be cleaned regularly to prevent development of off flavours in beer and to ensure proper operation of the draught system
 - b. Draught line cleaning required every 7 days or less
 - c. Due to hazardous nature of cleaning solutions, never attempt to pour beer prior to full completion of draught system cleaning
- E. Beer glassware
 1. Select appropriate glassware
 - a. Size
 - i. UK glasses are sized at 1/3, 1/2, 2/3, or full pint
 - In most cases the glass is intended to be filled to the rim to achieve the proper volume
 - Occasionally lined glasses may be seen, which allow room for head to form
 - ii. The standard serving size for a beer will be based on alcohol content (stronger beer, smaller glass) and product cost
 - iii. Standard pour should be 95% beer; 5% foam
 - iv. Customer has the right to a top up
 - b. Shape
 - i. Cultural and historical traditions connect certain glasses to specific styles

¹ “Profit Through Quality” Edition 7, June 2013. BIIAB p 54.

- c. Brand
 - i. Branded glasses matched to beer
2. Use beer clean glassware
 - a. Daily glass washing
 - i. Each glass must be cleaned before refilling. Do not refill a used glass
 - ii. Empty remaining contents of glass into sink/drain or garbage before you begin the cleaning process. Drinks and debris must not be dumped in glasswasher
 - iii. A brush bowl or finger sponge charged with non-foaming glass detergent should be used to remove lipstick and other visible deposits from rim
 - iv. Glasses used for cream-containing drinks should be sent to the kitchen for washing in the dishwasher. Otherwise fat from cream will coat the glassware and glass-washing machine resulting in poor head retention
 - v. For machine washing:
 1. Place glass upside down on the rack of the bar dishwasher
 2. Ensure that the machine is supplied with the manufacturer's recommended detergent and glasswashing rinse aid
 3. Wash cycle must use water at a minimum temperature of 55 °C. Higher temperatures may be recommended
 4. Rinse cycle must use water at a minimum temperature of 65 °C. Higher temperatures may be recommended
 5. After washing, glasses should be left to drip dry and cool for 30 minutes before storage or use
 6. Periodically check the interior of the dish washer to be sure that it is free of mould and debris
 - b. Renovation
 - i. Minerals or protein can build up on glasses after repeated washing
 - ii. Cleaning with a special “renovate” detergent can return them to ideal condition. Follow manufacturers recommendations
 - c. Checking glass for “beer clean”
 - i. Without beer
 - Sheeting (wet glass, empty, water should sheet off of glass evenly; formation of droplets (rain on the window) or webbing indicates not beer clean) (a.k.a. “Waterbreak”)
 - Salt test (wet glass, sprinkle salt throughout; places where salt does not adhere are not beer clean)
 - ii. With beer
 - Head size, shape, retention: good head formation and retention are signs of a beer clean glass.
 - Bubbles clinging to sides of glass (in liquid beer) indicate **not** beer clean
 - During consumption, a bit of foam (so called “lace”) will cling to the side of a beer clean glass following each sip
 - d. Glass temperature
 - Glasses should not be warm to the touch when filled
 - Room temperature and chilled glasses are acceptable

- Frozen/frosted glasses are not recommended: causes foaming, makes beer too cold, frozen water or sanitizer may be present

F. Serving bottled beer

1. Prepare for service
 - a. Bottle-conditioned beer should be stored upright prior to service
 - b. All bottled beer should be stored in refrigerator for 8 to 24 hours prior to service
 - c. Service temperature for bottled beer is 4° C to 6° C, though some bottle-conditioned beers may be served a bit warmer
2. Examine bottle
 - a. Look for white flakes (snow-like), which can indicate old, unstable beer. Do not serve beer in this condition
 - b. Look for a thin ring of gunk at liquid level in neck—generally indicative of a bad bottle if present. Do not serve beer in this condition
 - c. Check for yeast on bottom of bottle
 - i. Retain yeast in bottle unless:
 - Consumer requests yeast to be poured
 - Style (e.g., Weissbier) is traditionally poured with yeast
 - ii. To pour yeast, rouse by swirling, rolling, or inverting
3. Opening bottle: twist-off, pry-off, cork, combo
 - a. Twist-off caps
 - i. Twist off by hand
 - ii. Napkin may be used to aid grip and protect hand
 - b. Pry-off caps
 - i. Prefer openers with a bar or other lift area at least ¼ inch wide to prevent possibility of breaking the bottle during opening
 - ii. Lift in one motion
 - c. Mushroom cork
 - i. Remove wire cage by untwisting the tab
 - ii. Remove cork by hand—napkin may aid grip
 - iii. Be gentle so as not to disturb sediment and make beer volatile
 - iv. Practice cork safety—keep bottle pointed away from consumer at all times
 - d. Cap plus cork: corkscrew will be required after removing cap
 - e. Present the cork (always) or the cap of a rare, unusual, or new beer, to the consumer
 - f. Check bottle lip: do not serve beer from bottles with broken/damaged lips
 - g. Also examine bottle lip for rust, dried beer, or yeast that could affect flavour or appearance of beer
4. Pouring bottled beer
 - a. Filtered beer
 - i. Beers bottled without yeast or other sediment—the entire contents of the bottle can be poured into the glass
 - ii. Hold glass at 45-degree angle, pour down the side until glass is half full
 - iii. Gently tilt glass upright and pour down the middle to create approximately one inch of foam head on the beer as the pour finishes. Weizens and Belgian ales traditionally have two to four inches of head

- b. Unfiltered beers
 - i. Some beers are packaged with yeast in the bottle or completely unfiltered
 - ii. Unfiltered beer should still be poured using the method described above in section I.F.4.a
 - iii. In most cases, yeast should be retained in the bottle. Be prepared to stop pouring when the yeast moves toward the top of the bottle
 - iv. When in doubt about pouring yeast, ask the consumer their preference
- G. Serving draught beer
 - 1. Pouring a draught lager or keg ale
 - a. Hold glass at 45-degree angle, one inch below the tap faucet. Do not allow tap to come in contact with the glass or its contents during dispense
 - b. Pull tap handle forward to the fully open position to start the flow of beer
 - c. Pour down the side of the glass
 - d. As the glass fills, gently tilt glass upright. For the final inch or two, pour down the middle to create an appropriate amount of head on the beer
 - e. Close faucet as foam cap reaches the top of the glass to prevent beer waste
 - f. Target depth for head is 10 mm (~1/2 inch)
 - g. Beer served in lined glasses must have liquid to the line
 - h. Non-lined glasses: 95% of glass contents must be liquid and customers who request a top-up must be accommodated
 - 2. Pouring nitro stout
 - a. Hold glass at 45-degree angle, one inch below the tap faucet. Do not allow tap to come in contact with the glass or its contents during dispense
 - b. Pull tap handle forward to the fully open position to start the flow of beer
 - c. Pour down the side until glass is three-quarters full
 - d. Settle for 1-2 minutes then pour down the middle to fill to the top, with head in accordance with brand-owner's directions
 - 3. Changing a keg (same product)
 - a. Kegs must be in the beer cellar for at least 24 hours before serving
 - b. For D-, G-, S-, and U-type couplers:
 - 1. Grip keg coupler handle, pull out and raise to the "up" or "off" position to disengage. Turn the coupler a quarter turn (90 degrees) counterclockwise to unseat. Lift off of the keg
 - 2. Seat the coupler on a new keg. Turn clockwise a quarter turn (90 degrees) to lock the coupler in place, then lower the coupler handle to the "down" or "on" position to engage
 - c. For A- and M-type couplers:
 - 1. Grip keg coupler handle, depress the button on the underside of the handle (if a button is present), and raise to the "up" or "off" position to disengage. Slide the coupler off of the keg valve
 - 2. Slide the coupler on to the keg valve of a new keg. Lower the coupler handle to the "down" or "on" position to engage
 - d. When present, the foam-on-beer (FOB) detector for the keg needs to be reset after a keg change. This is done by venting the FOB mechanism to release foam and gas from the chamber
- H. Cask-conditioned ale

- a. Definition of Real Ale (CAMRA)
- b. Cask ale service
 - i. Gravity dispense
 - ii. Beer engine
 - Short spout
 - 1. Hold glass at 45-degree angle, making sure that spout does not touch the glass or its contents throughout the filling process
 - 2. Pull the handle smoothly and steadily. Straighten the glass gradually as it fills. Aim for no more than 10 mm of foam
 - Swan neck
 - 1. Hold clean glass vertically with sparkler positioned against the bottom of the glass
 - 2. Pull pump smoothly, keeping sparkler against the bottom of the glass until it is full
 - 3. Allow to settle. To top up, keep the nozzle in the liquid beer. If using a sparkler, foam should be no more than 10 mm high
 - 4. Regularly wipe down the swan neck with a clean, micro-fibre, lint-free cloth
- c. Cask Ale Essentials
 - i. Cloudy beer should not be served
 - ii. At the start of service, hard spiles must be removed from each cask to be served*
 - iii. At the end of service, hard spiles must be replaced in each cask that was on service*
 - iv. Consult cellar manager before tilting casks or making any other adjustments or modifications to the setup

* Instead of using a hard spile, in some modern cask ale service systems a vent valve may be opened at the start of service and closed at the end of service

II. Beer Styles

- A. Understanding beer styles
 - 1. The historical development of beer styles
 - a. First driven by available ingredients, equipment, and water
 - b. Shaped by technology, taxes and regulations, culture, consumer appeal, etc.
- B. Style parameters
 - 1. Knowledge requirements
 - a. For each style listed in the syllabus candidates should possess:
 - i. Qualitative knowledge of perceived bitterness using the following descriptors: low, moderate, pronounced, assertive, or highly assertive²
 - ii. Qualitative knowledge of colour using the following descriptors: straw, gold, amber, brown, or black
 - iii. Qualitative knowledge of alcohol content using the following descriptors³:

² Test questions will reference IBUs as catalogued by the 2015 BJCP guidelines in addition to perceived bitterness levels as presented in the Certified Beer Server Syllabus

- lower, normal, elevated, high, or very high⁴
2. Quantitative parameters of beer character
 - a. Alcohol content
 - i. By volume
 - b. International Bitterness Units
 - c. EBC Colour
 3. Qualitative parameters of beer character
 - a. Aroma
 - b. Flavour
 - c. Aftertaste
 - d. Mouthfeel
 - e. Perceived bitterness
 - f. Appearance
- C. History, characteristics, and flavour attributes of styles by region⁵
1. Belgium and France
 - a. Lambic beers
 - i. Gueuze (PB – Low; C – Straw to gold; ABV – Normal to elevated)
 - ii. Fruit Lambic (Kriek, Framboise, etc.) (PB – Low; C – Varies with fruit; ABV – Normal to elevated)
 - b. Flanders ales
 - i. Flanders Red Ale (PB – Low; C – Red-brown; ABV – Normal to elevated)
 - c. Trappist and abbey ales
 - i. Belgian Dubbel (PB – Low; C – Light amber to dark amber; ABV – Elevated)
 - ii. Belgian Tripel (PB – Moderate; C – Straw to gold; ABV – High)
 - d. Pale Belgian beers
 - i. Belgian Blond Ale (PB – Low; C – Light gold to gold; ABV – Elevated)
 - ii. Belgian Golden Strong Ale (PB – Moderate; C – Straw to gold; ABV – High to very high)
 - e. Unique beers
 - i. Saison (PB – Moderate; C – Light gold to amber; ABV – Normal to elevated)
 - ii. Witbier (PB – Low; C – Straw to light gold, made white by haze; ABV – Normal)
 2. Britain and Ireland
 - a. England
 - i. Pale ales
 - Ordinary Bitter (PB – Pronounced; C – Gold to amber; ABV – Lower)

³ Alcohol level descriptors correspond to the following ABV ranges: Lower – <4.5%; Normal – 4.5-6.0%; Elevated – 6.1-7.5%; High – 7.6-10.0%; Very high – >10.0%

⁴ Test questions will reference ABV values as catalogued by the 2015 BJCP guidelines in addition to alcohol level descriptors as presented in the Certified Beer Server Syllabus

⁵ Key for style descriptors: PB – Perceived Bitterness; C – Colour; ABV – Alcohol level

- Best Bitter (PB – Pronounced; C – Gold to amber; ABV – Lower to normal)
- Strong Bitter (PB – Pronounced; C – Gold to dark amber; ABV – Normal)
- British Golden Ale (PB – Pronounced; C – Straw to gold; ABV – Lower to normal)
- English IPA (PB – Assertive; C – Gold to amber; ABV – Normal to elevated)
- ii. Dark ales
 - British Brown Ale (PB – Moderate; C – Amber to brown; ABV – Lower to normal)
 - Sweet Stout (PB – Low to moderate; C – Dark brown to black; ABV – Lower to normal)
 - Oatmeal Stout (PB – Moderate; C – Brown to black; ABV – Lower to normal)
- b. Scotland
 - i. Scottish Export (PB – Moderate; C – Amber to brown; ABV – Lower to normal)
 - ii. Wee Heavy (PB – Low; C – Amber to brown; ABV – Elevated to high)
- c. Ireland
 - i. Irish Stout (PB – Pronounced; C – Brown to black; ABV – Lower to normal)
- 3. Germany, Czech Republic, and Austria
 - a. Lagers
 - i. Pale
 - German Pils (PB – Pronounced; C – Straw to light gold; ABV – Normal)
 - Munich Helles (PB – Moderate; C – Straw to light gold; ABV – Normal)
 - Czech Premium Pale Lager (PB – Pronounced; C – Straw to Gold; ABV – Lower to normal)
 - ii. Amber or dark
 - Märzen (PB – Moderate; C – Gold to dark amber; ABV – Normal to elevated)
 - iii. Bocks
 - Helles Bock (PB – Moderate; C – Gold to light amber; ABV – Elevated)
 - Doppelbock (PB – Low; C – Gold to brown; ABV – Elevated to high)
 - b. Ales
 - i. Wheat beers
 - Weissbier (PB – Low; C – Straw to gold; ABV – Normal)
 - Berliner Weisse (PB – Low; C – Straw; ABV – Lower)
 - Gose (PB – Low; C – Straw to light gold; ABV – Lower to normal)
 - ii. Rhine Valley ales
 - Kölsch (PB – Moderate; C – Straw to light gold; ABV – Normal)
- 4. United States

- a. Pale lagers
 - i. American Light Lager (PB – Low; C – Straw; ABV – Lower)
- b. Pale ales
 - i. American Wheat Beer (PB – Moderate; C – Straw to gold; ABV – Lower to normal)
 - ii. American Blonde Ale (PB – Moderate; C – Straw to gold; ABV – Lower to normal)
 - iii. American Pale Ale (PB – Pronounced; C – Light gold to light amber; ABV – Normal)
 - iv. American Amber Ale (PB – Pronounced; C – Light amber to dark amber; ABV – Normal)
- c. IPAs
 - i. American IPA (PB – Assertive; C – Gold to amber; ABV – Normal to elevated)
 - ii. Double IPA (PB – Highly assertive; C – Gold to dark amber; ABV – High)
- d. Dark ales
 - i. American Brown Ale (PB – Moderate; C – Dark amber to black; ABV – Normal)
 - ii. American Porter (PB – Pronounced; C – Brown to black; ABV – Normal to elevated)
 - iii. American Stout (PB – Assertive; C – Dark brown to black; ABV – Normal to elevated)
 - iv. Imperial Stout (PB – Pronounced; C – Dark brown to black; ABV – High to very high)
- e. Strong ales
 - i. American Barleywine (PB – Pronounced; C – Light amber to light brown; ABV – High to very high)
5. Other regions
 - a. International
 - i. International Pale Lager (PB – Moderate; C – Straw to gold; ABV – Normal)

III. Beer Flavour and Evaluation

A. Taste and flavour

1. How we perceive flavour
 - a. Aroma
 - b. Taste
 - i. Established
 - Sweet
 - Salty
 - Sour
 - Bitter
 - Umami
 - ii. Emerging
 - Fat

- c. Mouthfeel
 - i. Body
 - ii. Carbonation
2. Beer evaluation
 - a. Components of evaluation
 - i. Appearance
 - ii. Aroma
 - iii. Taste
 - iv. Mouthfeel
 - v. Aftertaste
 - b. Key evaluation techniques
 - i. Aroma techniques
 - Distant Sniff: Swirl beer while holding glass six to eight inches away from nose and take one to two short sniffs
 - Short Sniff: Swirl beer; bring glass to nose and take one to two short sniffs
 - Long Sniff: Swirl beer; bring glass to nose and take one long sniff
 - Covered Sniff: Cover glass with hand; swirl beer for three to five
 - ii. Use consistent background to assess colour and clarity
 - iii. Beer should reach all parts of tongue during tasting
 - iv. Flavour perception continues after swallowing
- B. Identify normal flavours of beer and their source
 1. Malt and grain flavours
 - a. Pale beer: Uncooked flour, bread dough
 - b. Golden beer: White bread, wheat bread, water cracker
 - c. Light amber beer: Bread crust, biscuit, graham cracker
 - d. Amber beer: Toast, caramel, pie crust
 - e. Brown beer: Nutty, toffee, chocolate, dark/dried fruit
 - f. Black beer: Roast, burnt, coffee
 2. Hops
 - a. Bitterness, flavour and aroma effects
 - b. Traditional regional hop traits
 - i. American: Piney, citrus, resinous, tropical fruit, catty
 - ii. English: Earthy, herbal, woody
 - iii. German/Czech: Floral, perfumy, peppery, minty
 3. Fermentation flavours
 - a. Ale versus lager flavours (See Ingredients section IV.A.3.a)
 - b. Weizen yeast flavour
 - c. Other yeast and bacteria can contribute to beer flavour
- C. Off-flavour knowledge
 1. Oxidation
 - a. Papery/wet cardboard
 - b. Waxy/lipstick
 2. Light struck
 3. Dirty draught lines
 - a. Buttery

- b. Vinegar

IV. Beer Ingredients and Brewing Processes

A. Ingredients

1. Grains
 - a. Malt
 - i. Malt is produced by sprouting and drying cereal grain such as barley or wheat
 - ii. Different shades and flavours of malt are produced by variations in kilning
 - b. Unmalted grains such as corn or rice are sometimes used
2. Hops
 - a. Hop character in beer
 - i. Depending on use, hops can contribute bitterness, flavour, and/or aroma
 - ii. Aroma and flavour vary with variety
 - b. Basic anatomy of hop plant and cone
 - c. Major growing regions
 - i. Germany
 - ii. Czech Republic
 - iii. Britain
 - iv. United States
 - v. Australia and New Zealand
3. Yeast
 - a. Taxonomy
 - i. Ale yeast
 - *Saccharomyces cerevisiae*
 - Generally produce esters in levels which give fruity flavours to finished beers
 - Some possess a phenolic off-flavour gene (POF+) which results in production of phenolic flavours such as clove, nutmeg, white pepper
 - ii. Lager yeast
 - *Saccharomyces pastorianus* also known as *Saccharomyces carlsbergensis*
 - Generally do not produce esters or phenols in appreciable quantities, resulting in a focus on malt and hop character
 - b. Other yeast and bacteria can contribute to beer flavour
4. Water
 - a. Water makes up 90+% of the weight of beer
 - b. All water contains traces of minerals
 - i. Many are essential to beer production
 - ii. Several have desirable flavour impact
 - c. Modern brewers adjust water chemistry to fit the requirements of the beer they brew

V. Pairing Beer with Food

No single model perfectly explains all the dynamics of beer and food pairing. Candidates at this level should understand that beer and food work well together, but do not need to possess knowledge of specific beer and food interactions.