Cicerone® Certification Program
Australia & New Zealand
Certified Beer Server Syllabus

Updated 20 November 2017

This syllabus outlines the knowledge required of those preparing for the Certified Beer Server exam in Australia and New Zealand. 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.

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Appendix A: Australian Beer Styles

Full Syllabus

I. Keeping and Serving Beer

A. Beer distribution
   1. Various parties participate in the production and delivery of beer in Australia and New Zealand
      a. Brewery – brews and packages beer into kegs, bottles, cans, etc.
      b. Importer – imports packaged beer from one or more overseas brewers then promotes it and manages distribution locally. In most ways, the importer acts in the same way a local brewer does in the local market
      c. Distributor – Independent businesses who stock, promote, and deliver the beers of a number of breweries and importers to generate sales within a certain geographic area
      d. Retailer – a bar, pub, restaurant, liquor store, grocer, or other business that sells beer direct to consumers
   2. Independent retailers may buy direct from a combination of brewers, importers, and distributors
      a. Some retailer groups operate their own distribution networks that buy from brewers and importers and manage distribution throughout the country or individual states from their own warehouses
      b. When receiving beer shipments, check date codes to ensure that the beer can be sold well before it has expired

B. Serving alcohol
   1. Alcohol's effects
      a. Absorption and elimination
      b. Physical and behavioral indicators
   2. Responsible serving practices
      a. Provide accurate ABV information to consumers
      b. Adjust serving size based on ABV

C. Beer storage
   1. Beer is best consumed fresh
      a. When beer is released from the brewery, it is ready to drink
      b. 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. Freshness can be preserved and enhanced by wholesaler and retailer actions
      a. Rotate inventory
         i. Ensure that beer is consumed or sold in the order of dating
         ii. Remove out of date products from service inventory
         iii. Fresh beer is best. For best flavor, strive to serve beer within these time frames:
            - Kegs: 90 days after filling
            - Bottled beer: within 6 months of bottling
              – When not refrigerated or if subjected to other stresses, bottled beer may be noticeably

different from fresh beer after as little as three months

iv. Staff should sell/promote all beers offered to improve turnover

b. Store beer properly
   i. In Australia and New Zealand, most beer is stored at room temperature until immediately prior to service
   ii. Refrigerated storage helps beer taste fresh for longer. If beer is not refrigerated, keep inventories small and sell the beer quickly
   iii. Beer should be protected from heat in all situation as exposure to temperatures in excess of 25 °C lead to rapid changes in flavour
c. Bottled beers are subject to developing lightstruck flavor
   i. Caused by sunlight and fluorescent light
   ii. Most noticeable in the aroma of the beer
   iii. Brown glass blocks 98% of the wavelengths of light that cause lightstruck flavor, and therefore offers superior protection to clear and green glass
   iv. Green glass blocks 20% of the wavelengths that cause lightstruck flavor
   v. Clear glass offers no protection against lightstruck flavor
   vi. Lightstruck flavor may be evident after a few minutes of light exposure in both green and clear bottles
   vii. Cans, ceramic bottles, and bottles in closed case boxes that completely shield beer from light give maximum protection from development of lightstruck flavor
d. Serve beer properly
   i. Draught beer must be served using CO_2 or a CO_2-nitrogen mix at the proper pressure setting.
   ii. Compressed air should never be used instead of CO_2 or a CO_2-nitrogen mix in a draught dispense system
   iii. Use of compressed air or a party pump limits the flavour stability of the beer to less than one day because oxygen is put in direct contact with the beer.

D. Draught systems
1. Key elements
   a. Keg
   b. Coupler
   c. FOB (Foam-on-beer) detector
   d. Tap
2. Draught system operation
   a. Standard cold room temperature of 3-4 °C
   b. All kegs should be in the cooler for 24 hours prior to service to prevent foaming
   c. Many draught systems apply additional chilling in the font so that beer arrives in the glass at temperature colder than 3 °C

d. Gas pressure applied to keg should only be set or adjusted by a draught-trained professional

3. Basic troubleshooting
    a. Beer has been in cooler 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 to prevent development of off flavours in beer and to ensure proper operation of the draught system
    b. Cleaning required every 14 days
    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. Based on style and alcohol content (stronger beers, smaller glass)
        ii. Provide room for an appropriately sized head
    b. Shape
        i. Cultural and historical traditions connect certain glasses to specific styles
    c. Brand
        i. Branded glasses matched to beer
2. Use beer clean glassware
    a. Daily glass washing
        i. Used glasses must be cleaned as follows prior to refilling with beer
        ii. Empty remaining contents of glass into sink/drain
        iii. Plunge the rim of the glass into a brush bowl. Rinse glass with water if possible. Follow with machine washing or hand washing
        iv. For machine washing:
            - Place glass upside down on the rack of the bar dishwasher
            - Ensure that the machine is supplied with the manufacturer's recommended detergent
            - Wash cycle must use water at a minimum temperature of 65 °C
            - Rinse cycle must use water at a minimum temperature of 82 °C
            - After washing, glasses should be left to drip dry before storage
        v. For hand washing:

- When automatic dishwasher is not available, hand washing may be used
- Use the plunge bowl with glass detergent to clean the glass thoroughly, paying special attention to the rim
- Immerse glassware in potable water at a minimum temperature of 77 °C for a minimum of thirty seconds
- After washing, glasses should be left to drip dry before storage

b. Weekly glass washing
   i. Glasses only washed by glass washing machine on a daily basis should be given a manual washing once each week
   ii. Follow the procedure given above in I.E.2.a.v for hand washing glasses

c. Checking glass for "beer clean" status
   i. Without beer
      - Sheeting (wet glass and empty, water should sheet off of glass evenly; formation of droplets or webbing indicates not beer clean)
      - Salt test (wet glass, sprinkle salt throughout; places where salt does not adhere are not beer clean)
   ii. With beer
      - Head size, shape, retention
      - Bubbles clinging to sides of glass (in liquid beer) indicate not beer clean
      - During consumption, lace will cling to the side of a beer clean glass following each sip

d. Preparation to serve
   i. Glass temperature
      - Room temperature and chilled glasses are acceptable
      - Chilled glasses are not required for beer service. The use of room temperature glassware can help to reveal the flavor of the beer
   ii. In European and American brewing cultures, a cold water rinse of the glass is often used before filling
      - Cools glasses that may be warm from washing
      - Aids ideal head formation and retention

F. Serving bottled beer
   1. Prepare for service
      a. Bottle-conditioned beer should be stored upright prior to service
      b. If possible, store beer at ideal serving temperature as dictated by style, otherwise store all beer under refrigeration (6 °C or less)
      c. Overly chilled beer may form a haze
   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. To pour using "crusting" method:
            - Hold glass in one hand, bottle in the other
            - Tilt the glass slightly so that when you begin to pour, the beer hits the corner of the glass—where the bottom and side of the glass meet—to create turbulence and foam
            - As you continue to pour, direct the stream of beer so that it strikes the side of the glass at the edge of the foam. This should help to maintain and build a foam head so that the proper head has formed by the time the glass is full
    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 "crusting method" (described above in point I.F.4.a.ii)
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 beer
a. Hold glass in one hand, operate the tap with the other hand
b. To pour using "crusting" method:
i. Tilt the glass slightly so that when you begin to pour, the beer hits the corner of the glass—where the bottom and side of the glass meet—to create turbulence and foam
ii. As you continue to pour, direct the stream of beer so that it strikes the side of the glass at the edge of the foam. Move the stream of beer as the glass fills to maintain this position. This should help to maintain and build a foam head so that the proper head has formed by the time the glass is full
iii. Close tap as foam cap reaches the top of the glass to prevent beer waste
iv. Never put tap in contact with the glass or allow it to become immersed in beer in the glass
2. Pouring nitro beer
a. Hold glass at 45-degree angle, 2.5 cm below the faucet. Do not allow faucet 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 create appropriate amount of head on the beer as the pour finishes
3. Keg management (same product)
a. Kegs must be chilled to draught system operating temperature (generally 3 °C) before tapping and serving—general guideline is 24 hours in cooler before serving
b. Changing a keg with a "D" type coupler
i. Grip the 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
ii. 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. Changing a keg with an "A" type coupler
i. Grip the keg coupler handle, pull out and raise to the "up" or "off" position to disengage. Slide the coupler off the keg

ii. Fully slide coupler onto the new keg and lower the coupler handle to the "down" or "on" position to engage

d. In systems that use them, the foam-on-beer (FOB) monitor for the keg needs to be reset after a keg change. This is usually done by venting the FOB mechanism to release foam and gas from the chamber

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 assertive[1]
      ii. Qualitative knowledge of colour using the following descriptors: straw, gold, amber, brown, or black
      iii. Qualitative knowledge of alcohol content using the following descriptors[2]: lower, normal, elevated, high, or very high[3]
2. Quantitative parameters of beer character
   a. Alcohol by volume (ABV)
   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 region[4]

1. Australia[5]
   a. Australian Lager (PB – Moderate; C – Light gold to light amber; ABV – Lower to normal)

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[1] 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

[2] 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%

[3] Test questions will reference ABV values as cataloged by the 2015 BJCP guidelines in addition to alcohol level descriptors as presented in the Certified Beer Server Syllabus

[4] Key for style descriptors: PB – Perceived Bitterness; C – Colour; ABV – Alcohol level

[5] See Appendix A at the end of this document for complete descriptions of these Australian styles

b. Australian Pale Ale (PB – Moderate; C – Straw to amber; ABV – Normal)

2. 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)
3. Britain and Ireland
   a. England
      i. Pale ales
         - Best Bitter (PB – Pronounced; C – Gold to amber; 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. 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)

4. 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)
5. 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)

6. 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. Very cold beer does not express its full flavor profile during tasting. Beer reveals more flavor as the temperature of the beer increases. For evaluation purposes, pour draught beer or remove bottled beer from the cooler approximately 20-30 minutes before tasting
b. Components of evaluation
i. Appearance
ii. Aroma
iii. Taste
iv. Mouthfeel
v. Aftertaste

c. Key evaluation techniques
i. Aroma techniques

- Distant Sniff: Swirl beer while holding glass 15-20 centimeters 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 seconds; bring glass to nose, remove hand, and sniff

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, resiny, tropical fruit, catty
         ii. Australian: Passionfruit, melon, pear, tropical fruit
         iii. English: Earthy, herbal, woodsy
         iv. German/Czech: Floral, perfumy, peppery, minty
   3. Fermentation flavours
      a. Ale versus lager flavours (See Ingredients section IV.A.3.a)
      b. Weizen yeast flavor
      c. Other yeast and bacteria can contribute to beer flavor

C. Off-flavour knowledge
   1. Oxidation
      a. Papery/wet cardboard
      b. Waxy/lipstick
   2. Lightstruck
   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
      vi. 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
      iii. Other yeast and bacteria can contribute to beer flavor
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.

Appendix A: Australian Beer Styles

These style descriptions are drawn from the 2016 Entry Booklet for the Australian International Beer Awards published by The Royal Agricultural Society of Victoria.

II.C.1.a. Australian Lager
Light/straw to amber in colour (less than 15 EBC). Aroma is generally comprised of low to medium esters, predominantly fruity. A subtle to moderate hop aroma and taste may be perceived. Bitterness ranges from low to medium, noble hop character should not be present. Residual malt/sugar sweetness should be low with a light to medium body. A medium to high carbonation and clean palate provide a crisp finish. Diacetyl and chill haze should not be present. Low levels of DMS can be present in pale lagers.

Original Gravity (ºPlato)	1.040 – 1.045 (10.0º – 11.0º Plato)
Apparent Extract/Final Gravity (ºPlato)	1.005 – 1.008 (1.3º – 2.0º Plato)
Alcohol by Weight (ABV%)	3.1 – 3.9% (4.0 – 5.0%)
Bitterness (IBU)	15 – 30
Colour SRM (EBC)	3.5 – 9.0 (7.0 – 18.0 EBC)

II.C.1.b. Australian Pale Ale
A mild, pale, light-bodied ale which can vary in colour from light pale through to medium amber; perceivable fruity esters are a defining character of this beer style. Haze is acceptable in a bottle conditioned beer, chill and/or hop haze is acceptable at low levels but is not essential for the style. Malt sweetness and other malt character is low. Fruity esters should be present and can be balanced by low to medium hop aroma. Hop flavour should be present in low to medium intensity with the bitterness ranging from low to medium. Diacetyl should be very low if present. DMS aroma should not be present. Body is low to medium with a dry finish.

Original Gravity (ºPlato)	1.040 – 1.052 (10.0º – 12.5º Plato)
Apparent Extract/Final Gravity (ºPlato)	1.004 – 1.010 (1.0º – 2.5º Plato)
Alcohol by Weight (ABV%)	3.5 – 4.7% (4.5 – 6.0%)
Bitterness (IBU):	15 – 40
Colour SRM (EBC):	3 – 13 (6.0 – 25.0 EBC)