11C: Strong English Bitter18B: Pale American ales21A: American ipa

11c: Strong english bitter

- Very broad category
- Three different versions: "Ordinary", "Best" and "Strong"
- Styles are identical with exception of strengh.
- Broad range of acceptable parameters
- Ideal for 'casking'
- English hop varieties make the best bitters. (Big surprise!!)
- Best when using English pale malt, and a bit of crystal is added.
- May "burtonize" your water to accentuate the hops, but be careful!!
- Acceptable Yeasts: Wyeast 1968, Safale 04, Whitelabs 02

18B: Pale American ale

- Has a malt profile, but not a malt forward beer.
- Can be slight to firmly bitter
- Any fruitiness should come from hops, and not fermentation esters
- APAs can be fruity, but floral, spicy, and piney are also acceptable, and welcomed!
- Brew with American two-row for a clean malt character, American Pale malt for a more bready malt note.
- Steer clear of darker caramel malts, Victory, cara-pils, wheat malt are okay...
- Single infusion mash around 150-154, use clean ale yeast (1056, US05)
- Ferment on the cooler side (64-66) to suppress esters. Then rise.

21A: American IPA

- Has a malt profile, but much less than an English IPA
- Malt profile should be clean and subtle
- Can include lower levels of crystals (< 40) in very small amounts, or
- All about the hops! (40-70 IBU Range)
- Any "C" hops, along with Simcoe, Amarillo, New Zealand Varieties
- Brew with American two-row for a clean malt character, American Pale malt for a more bready malt note.
- Single infusion mash around 150-154, use clean ale yeast (1056, US05) to let the hops shine

21A: American IPA Continued

- Keep your hop additions simple (three or less varieties)
- Bitterness should be obvious, but not harsh or "pithy"
- Whirlpool at 180F for maximum hot side hop extraction
- Dry hop at 62F for less than a week to prevent vegetative flavors
- Gypsum can help increase the hop character in low sulfate water.
- Clean highly attenuating ale strains (US-05, 1056) should be used
- Add some simple sugar (table sugar, turbinado, sugar in the raw) to dry the beer out.