



BeerSmith.comTM
Home Brewing

Beer Recipe Design
Brad Smith, PhD

Range of Beer Recipe Design



A spectrum of choices...



Deliberate – Mechanical



Artistic



Traditional Recipe Design



- ▶ Come up with an idea
- ▶ Research the target style and beer
 - Determine target color, gravity, bitterness
- ▶ Develop the:
 - Grain bill
 - Hop varieties and schedule
 - Yeast variety
 - Water profile
- ▶ Apply Techniques
 - Mash schedule, fermentation, hop techniques, more...
- ▶ Brew, Judge, and Iterate



Building Ingredient Blocks



- ▶ One way of thinking about recipes
 - Combination of ingredients that give you a certain effect – they work together
- ▶ Don't reinvent the wheel every time
 - Instead connect and merge existing blocks
 - Variations of things that already work



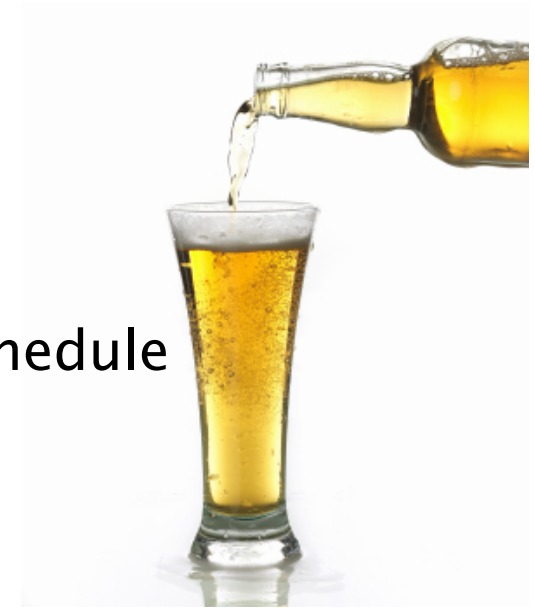
Gordon Strong
3x Top US Brewer
BJCP President
Grandmaster beer judge

“Creativity is just connecting things.

When you ask creative people how they did something, they feel a little guilty because they didn't really do it, they just saw something. It seemed obvious to them after a while.” -- Steve Jobs

Key Concepts

- ▶ A Well Defined Goal
- ▶ Simplicity
 - Each ingredient should have a purpose
- ▶ Techniques that Support Your Goal
 - Things like mash pH, temps, hopping schedule
- ▶ Judge, Troubleshoot and Correct
 - No beer is perfect
- ▶ Iterate
 - Few of us create award winning beers on the first try



Key Recipe Design Skills



- ▶ Knowledge of:
 - Ingredients and Flavors
 - In depth knowledge of ingredients and how they interact
 - The Brewing Process
 - Techniques to achieve a desired effect
 - Judging Beer Critically
 - Won't cover in depth, but will touch on key points
 - Troubleshooting and Improvement
 - Identifying problems with process/ingredients

Judging Your Beer

- ▶ Must be able to Judge your beer!
 - Evaluate external appearance first
 - Capture aroma up front – right after its poured
 - Evaluate color, clarity, head retention
 - Taste the beer– overall impression first
 - Finish, malt, hops, aroma
 - Obvious flaws
 - Mouthfeel
 - Overall Impression
- ▶ The BJCP score sheet is a great guide
 - Provides 17 taste terms (grassy, phenolic, astringent, etc...) used for evaluating beer
- ▶ Beer Judges are some of the best brewers!

