



Beer Lab Show-Flow

Overview

Take a trip back to your high school science lab, but forgo the frog dissections. Instead, dust off those science skills for something a lot more desirable: beer! Take a scientific tour of the ingredients behind your favorite sudsy brews, and don't forget to record your observations in your lab manual! Best grade in the class gets some sweet prizes!

Location and Set Up

Program will take place at Yards Brewing Company and feature a lab-like set up.

- AV:
 - Speaker System/Microphones (PSF Provides)
 - Computer (PSF Provides)
 - Slide Advancer (PSF Provides)
 - Projector and Screen (Yards Provides)
 - Proscope (PSF Provides)

Pre Show/Atmosphere

Preshow activities will be limited. Audience members will be given their drink ticket and can grab bite to eat from a food truck stationed outside. We will have a few pretzel platters available to snack on. A "lab manual" will be provided that would be similar to what you would see in a lab classroom – this literature will take them through what they will experience that evening. Seating will be throughout the tasting room and 14-15 lab kits will be handed out at the start of the introductions. **Because clearing the brewery may take a while after closing, we will encourage visitors to take a tour and let everyone know the program will start closer to 7:15/7:20pm**

Show Flow

Program will be introduced and launch right into the speakers for the night. Each speaker must finish their presentation in under 10 minutes IF a demo is not included in their talk. Every seat will have a taster glass and Yards staff will provide samples accordingly.

- Pre Program: Adam gives introduction (Sample: PSF Beer)
- Dr. Cynthia Skema, Morris Arboretum of the University of Pennsylvania (Topic: Botany of Barley & Hops) (Sample: Philadelphia Pale Ale)
 - Barley and what is is
 - Hops Dissection/Male & Female hops – Cindy to lead through the cutting and labeling



- Frank Winslow, Yards Brewing Company (Topic: Water) **(Sample: Love Stout or Brawler)**
 - Minerals
 - Three salts to identify
 - Demos with Frank – calcium chloride and water “hand warmer”, calcium carbonate + vinegar, pH measurements
- Matt, Yards Brewing Company (Topic: Malting) **(Sample: ESA)**
 - Iodine test, starching
- Matthew J. Farber, Ph.D., University of the Sciences (Topic: Yeast, Basic Fermentation, Density) **(Sample: Brawler)**
 - Sucrose/yeast balloons
 - Density Tower
- Tim Robinson, Yards Brewing Company – Pumping **(Sample: whatever is on hand pump)**
 - Woosh bottle
- Fred Schaefer, Ph.D., University of the Sciences (Topic: Skunking) **(Sample: good beer/bad beer Philadelphia Pale Ale)**

After some speakers Adam will take the audience through a science experiment that illustrates what they are about to hear or just learned. Other demos will occur during the talks. When possible, they will write their observations in their lab manual. At the very end we will hand out a “pop quiz” – highest grade(s) will get prizes.

Program will finish with a big TBD experiment (Possible beer bubble monster?)

Post Show

Audience will be able to mix and mingle with the speakers and brewers