

RahrBSG Lead Brewer Course 2026 Syllabus

- Total duration: 14 months
- Lectures bi-weekly on Thursdays
- Assessment via 12 papers submitted through course approximately every 6 weeks.

Raw Materials

Lecture team - Rod White, Chris Wilhelmi, Prof. Charlie Bamforth, Tom Shellhammer, Prof. David Cook

- Malting process
- Malt CoA + tutorial
- Raw materials and foam
- Adjuncts
- Hops
- Hopping modern beer styles
- Water chemistry

Brewhouse

Lecture team - Rod White, David Cook, Ashton Lewis

- Milling
- Mash conversion
- Mash separation (biochemistry & practical control of process)
- Boiling - including boiling chemistry and practical control over the process
- Modern hopping strategies
- Whirlpool and wort cooling

Residential Course - 1 week

Live & in-person: practical sessions, brewery visits, and lectures based at Rahr Technical Center

- Hands-on training – microbiology, brewery processes
- From grain to glass – review of the malting process through to final product
- Lectures from Fermentis, Berkeley Yeast, Donaldson Engineering

Yeast and Fermentation (including micro)

Lecture team - Trevor Cowley, Dan Kerruish, Rod White

- What is yeast
- Yeast and beer flavor
- Fermentation management
- Yeast handling in a brewery (pitching cropping)
- CIP and hygiene in fermentation
- Brewing microbiology and methods of detection

Beer Maturation and Finishing

Lecture team - Charlie Bamforth, Rod White, Jim Appelbee, Ashton Lewis

- Maturation (traditional vs modern)
- Centrifugation
- Flavor stability
- Brewing quality management
- Filtration x flow and powder
- Craft filtration / sterile filtration
- BBT and carbonation
- Preparing craft beer styles for packaging (including cask beer)

Packaging

Lecture team - Charlie Bamforth, Rod White, Mike Sayer, Dan Kerruish

- Canning
- Bottling
- Kegging
- Flavor stability
- Pasteurization vs sterile filtration
- Impact of packaging on beer quality
- Packaging line efficiency
- Packaging line compliance