# **BREW 112 - The Analysis of Fermentation Fall 2019**

<u>Date</u>	<u>Topic</u>
Aug. 22	Intro/Overview
Aug. 29	Sampling; Lab safety & equipment; Chemical Analysis of Wort & Beer
Sept. 5	QA/QC
Sept. 12	Analysis of Yeast
Sept. 19	Field Trip to Seismic Brewing
Sept. 26	Quiz 1. Sensory Evaluation of Beer (Guest speaker)*
Oct. 3	Quiz 2. Intro to lab scale Brewing. Brew Bear Cub Ale
Oct. 10	Review for Midterm
Oct. 17	Midterm 1 (written & practicum)
Oct. 24	<u>Field Trip - Grizzly Malt &amp; Old Caz</u> *
Oct. 31	Quiz 3. Brew-Day 2, Group Brewing Assignment. *
Nov. 7	Brew-Day 3, Group Brewing Assignment. *
Nov. 14	Brew Day 4, Group Brewing Assignment. *
Nov. 21	Brew Day 5 Group Brewing Assignment. *
Nov. 28	Thanksgiving Holiday - No Class
Dec. 5	Group Presentation Prep, Lab Clean-up
Dec. 12	Final Group Presentations to tasting panel
Dec. 19	Final Exam date: no class

<sup>\*</sup>Date subject to change due to the availability of Field trip.

## **BREW 112- The Analysis of Fermentation**

<u>Instructor</u>: Kristen Krup,

kkrup@santarosa.edu; kristenk.microontap@gmail.com

Office Hours: End of class or by appointment: Lecture room (other as needed)

<u>Class Time</u>: Thursdays **5:00-10:00PM** 

Text: Bamforth, C.W. Standards of Brewing: A Practical Approach to

Consistency and Excellence. 2002.

<u>Grading</u>: Participation/ Attendance – 10%

Quizzes - 20%

Group Presentation – 30%

Exam - 40%

Course Outline: Official course outlines:

https://portal.santarosa.edu/SRweb/SR\_CourseOutlines.aspx

### **Outcomes and Objectives:**

Upon completion of this course, students will be able to:

- 1. Evaluate beer color, aroma, and flavor, and identify defects.
- 2. Demonstrate knowledge of beer ingredients through small batch brewing of their own recipes.
- 3. Identify sensory parameters of evaluating beer.
- 4. Identify beer defects, their cause, and prevention.
- 5. Perform small scale brewing of their own recipes.
- 6. Perform lab analysis on beer throughout the stages of production.
- 7. Perform quality assurance tests on finished or packaged beer.

#### Student Presentation and Report:

Students will work in groups to brew small batches of beer. They will use methods learned in class to analyze variations in ingredients and processes. They will report on their selections, findings, setbacks, and methods of analysis in a group presentation at the end of the semester to a beer sensory panel.

## **Student Conduct:**

All students must abide by the code of conduct:

https://go.boarddocs.com/ca/santarosa/Board.nsf/goto?open&id=A8JTGP775682 See Policy 8.2.8; Procedure 8.28.P