



HANDS-ON LEARNING IN CRAFT BREWING: BLENDING SCIENCE WITH PRACTICAL EXPERIENCE

Geoffrey Sasaki, PhD – Director of Craft Brewing
Craft Brewing Program | Department of Biology

Teaching Strategy

The Craft Brewing Program places a large emphasis in our curriculum on establishing early hands-on learning opportunities for our students. The strategy we typically utilize in our courses is experience the task first, learn the scientific principles and details as to what is occurring, then perform the task independently. For example, we provide early exposure to the brewing process either through our labs or visiting commercial breweries, then students learn the scientific principles that are occurring, then by the end of their college career they have the confidence and capabilities to perform a brew on their own.

Innovative Approach

Our project is innovative because it improves on our prior approaches by providing students the necessary hands-on experience to succeed in their future careers in brewing and as scientists. We realized that hands-on learning and experience was the best way to prepare our students for their future careers. So, our teaching approach is highly driven by experience working in the industry and guidance from industry professionals that focuses on skills and knowledge that are imperative for the students to be competitive applicants in the job market and succeed in their careers.

High-Impact Practices in Craft Brewing



Industry Field Trips
CLS Farms (Moxee, WA)



Industry Collaboration
Ellensburg Brewery



Practical Industry Experience
CRBW 450 – Sensory Analysis for Brewing



Group Projects
CRBW 370 – World of Fermented Foods

Equity & Accessibility

Our innovative strategy focuses on student learning by providing students the hands-on experience into brewing and fermentation science. This provides students an active learning experience where they get the opportunity to physically see, smell, and taste the ingredients and processes going on to help establish a better connection with our lectures. Additionally, our strategy focuses on equity and accessibility since the hands-on learning environment offers an inclusive opportunity to accommodate students with a different approach to learning and engagement with the material compared to more traditional teaching methods.

Evaluation of Innovative Strategy

Currently, our best indication of our strategy's effectiveness is based on our student's understanding and confidence when performing their independent projects. When they conduct their project, it is not their first time working with the equipment or seeing the brewing process. The students should be leading the brew and project and have an understanding as to the processes occurring. We plan to utilize our capstone course to evaluate our students full understanding of what they have learned over the course of the program and culminate it into a final project that they present.

