2013-2014 Assessment Report

College of Human Sciences

Nutrition, Dietetics & Hospitality Management

Program: Brewing Science and Operations, Graduate Certificate

Program Learning Outcome - Graduate Preparation
Graduates of the program will be satisfied that they are prepared for career entry in the commercial brewing sector.

Assessment Method 1: Alumni Survey

Assessment Method Description
Annually, alumni of the Brewing program will be evaluated across a range of issues pertaining to career preparation. Students are evaluated on their competency to work in commercial brewing industry settings. More specifically, graduates are asked to evaluate the relevance and importance of their curriculum to workplace performance. Students will be asked to self-report on a 5-point Likert scale anchored at “1=to a little extent” to “5= to a great extent.”

Findings
No findings are available to report as yet

How did you use findings for improvement?
Findings will be analyzed annually by all program faculty with a view to informing program improvement efforts

Additional Comments
The program is in its first semester of operation and survey results will not be available until at least one reporting period out - 2014/15

Assessment Method 2: Practicum Supervisor Reports

Assessment Method Description
Immediate supervisors at required Practicum sites will be invited to evaluate student work competencies based upon their experience with students in the HRMT7916 Brewing Practicum course. Supervisors will be asked to report on student competencies across a 5-point Likert scale anchored at "1=poor" to
"5=excellent."

Findings
No findings are available as yet

How did you use findings for improvement?
Findings will be analyzed annually by all program faculty with a view to informing program improvement efforts

Additional Comments
The program is in its first semester of operation and survey results will not be available until at least one reporting period out - 2014/15

Student Learning Outcome - Students will have a sound understanding of the science and materials involved in the commercial Brewing Process

Students will be assessed on their ability to identify and demonstrate competency in formula development, wort production, fermentation, and brew processing, modern and classical maturation strategies and analytical methods to determine quality and quality control procedures

Assessment Method 1: Term Project on viability of brew execution

Assessment Method Description
Student are required to design, plan and successfully execute a brewing project in one of the classic brewing styles and a development/fusion style of recipe formulation. A standardized assessment rubric will be used to evaluate actual performance as follows:
Advanced – Project is creative and demonstrates an in-depth understanding and analysis of the brewing process.
Proficient – Project demonstrates understanding and analysis of the brewing process but lacks either creativity or an in-depth understanding.
Marginal - Project is demonstrates some understanding and analysis of the brewing process and no creativity.
Unacceptable Project is demonstrates little understanding and analysis of the brewing process.

Findings
No findings are available as yet as this is the first year of the program's
operation

How did you use findings for improvement?
Findings will be reviewed annually to direct the continuous quality improvement effort for the program

Additional Comments
The program began formal operation in the fall semester 2014 - no actual results will be available for analysis and/or review until the 2014/15 reporting cycle.

Assessment Method 2: Term project on understanding the contribution of brewing ingredients to the final beer

Assessment Method Description
Students will be assessed on their ability to develop recipes through the knowledge of the use and contribution of primary and adjunct brewing ingredients. Students will be required to develop two recipes that will be evaluated for the appropriate use of ingredients (HRMT7116) and feasibility for production (HRMT7126 Brewing Science 1). Students will be evaluated through the use of the following assessment rubric:

Advanced: Each ingredient has a well-documented rationale as to how it will contribute to the beer; the recipe conforms ideally with the identified style and initially defined characteristics; the recipe is feasible for medium to large-scale production; the targeted parameters are calculated correctly without error (e.g., bitterness (IBU); color (SRM); starting and final gravity (OG and FG); mash and fermentation temperatures).

Proficient: Each ingredient has a documented rationale as to how it will contribute to the beer; the recipe conforms to the identified style; the recipe is feasible for medium to large-scale production; the targeted parameters are calculated corrected (e.g., bitterness (IBU); color (SRM); starting and final gravity (OG and FG); mash and fermentation temperatures).

Marginal: Recipe is basic with some gaps as to the rationale for ingredients or seems to lack minor ingredients; recipe may conform or nearly conform to identified style and/or targeted characteristics; some targeted parameters are calculated correctly, but some are incorrect (e.g., bitterness (IBU); color (SRM); starting and final gravity (OG and FG); mash and fermentation temperatures).

Unacceptable: Recipe has major gaps in the rationale for ingredients or lacks major required ingredients; recipe does not conform to identified style and/or targeted characteristics; targeted parameters are calculated incorrectly (e.g., bitterness (IBU); color (SRM); starting and final gravity (OG and FG); mash and fermentation temperatures).
Findings
No findings are available for review at this point

How did you use findings for improvement?
Findings will be used to continuously improve the quality of the program

Additional Comments

Student Learning Outcome - Enhanced Business Understanding
Develop an appreciation of the broad business environment and operational and functional skills necessary to bring a product to market and help it find a sustainable competitive edge

Assessment Method 1: Develop a business model
Assessment Method Description
Students will develop a business plan for starting a brewery in HRMT 7106 (The Business of Brewing). The cornerstone of an effective business plan is a business model, which refers to the process by which a company will make money. The business model specifies how the brewery will cope with and overcome competitive, financial, and marketing/promotion challenges.

Findings
The business models described within each student’s business plan will be assessed by the instructor using the following rubric-

Advanced – Business model is creative, insightful and displays an in-depth analysis of the business environment within which the brewery will compete. Reader gains excellent insights into the process through which the brewery will be profitable. How a sustainable competitive edge will be achieved is thoroughly explained and the explanation is very convincing.

Proficient – Business model is sufficiently developed to be successful. Student demonstrates an adequate grasp of the business environment within which the brewery will compete. Reader gains some insights into how the brewery will be profitable. How a sustainable competitive edge will be achieved is explained and the explanation is convincing.

Marginal - Content of business model and the underlying analysis are basic or general. Student demonstrates only a rudimentary grasp of the business
environment within which the brewery will compete. Reader gains few insights into how the brewery will be profitable. A marginal explanation of how a sustainable competitive edge will be achieved is provided.

Unacceptable - An adequate business model is not identified. Student does not demonstrate a grasp of the business environment within which the brewery will compete. Analysis is vague or not evident. Reader gains no substantive insights into how the brewery will be profitable. How a sustainable competitive edge will be achieved is not explained.

**How did you use findings for improvement?**
Student performance will be assessed annually and results will be used to inform ongoing and continuous course improvement.

**Additional Comments**

**Assessment Method 2:** Develop a sustainable approach to successful business operation

**Assessment Method Description**
Students will be required to develop a sustainable operations plan that can effectively be applied to their business model. This should be focused on the triple bottom line and how sustainable business principles will be incorporated into all facets of the day-to-day business operations. They will be expected to address the key operational challenge of ensuring effective customer satisfaction and resource productivity for the organization.

**Findings**

**How did you use findings for improvement?**

**Additional Comments**

The program is in its first semester of operation and assessment data will not be available until the next reporting cycle.