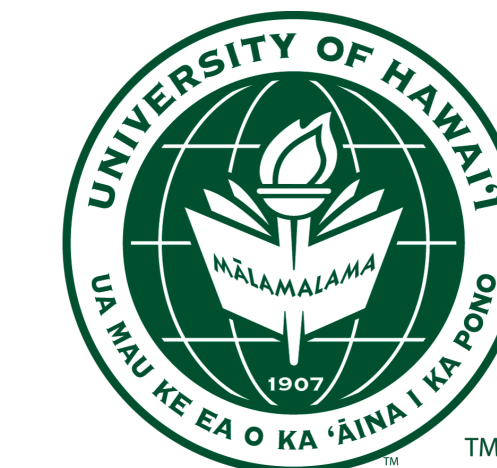


ASSESSING WRITTEN COMMUNICATION SKILLS ACROSS FOOD SCIENCE COURSES WITH A COMMON RUBRIC

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ABSTRACT

The Food Science and Human Nutrition (FSHN) Undergraduate program has established an ad-hoc committee to assess written communication skills across required food science courses. Involved faculty identified core writing-intensive food science courses within the FSHN curriculum that involve laboratory assignments and written laboratory reports. A rubric for assessing written laboratory and term project reports was selected as a common or shared rubric for instructors to use across their classes (Food Engineering, Food Microbiology, Food Chemistry, and Experimental Foods). The faculty hope to use these findings to make improvements in written communication skills across the program and hope to apply similar strategies in the future to identify strengths and weaknesses in other key competency areas across the FSHN undergraduate program.

INTRODUCTION

SNAPSHOT OF OUR PROGRAM

Food Science and Human Nutrition (FSHN)

- Bachelor of Science program within the Human Nutrition, Food and Animal Sciences (HNFAS) Department
- Five different FSHN tracks
- Three Food Science-related tracks* (Table 1)
- Faculty: 3 Food Science faculty (of 19 instructional faculty in department)
- Student numbers:
 - 10 in Food Science-related tracks
 - 5 are anticipated to graduate in Spring 2021

INTRODUCTION

Table 1. Food Science & Human Nutrition (FSHN) Bachelor of Science Tracks

Tracks
Food Science: Business*
Food Science: Pre-professional*
Culinology* (joint with Kapiolani Community College)
Sports and Wellness
Human Nutrition: Pre-professional

*Indicates a food science-related track

FOOD SCIENCE COURSES

- Students in Food Science Business, Pre-professional, and Culinology tracks take core classes that involve the development of written communication skills (Table 2).

Table 2. Core food science courses with written laboratory or term project reports.

Course Name and Number
Experimental Foods (FSHN 381/L)
Food Microbiology (FSHN 403)
Food Engineering (FSHN 411)*
Food Chemistry (FSHN 439/L)

*Elective FSHN course for Culinology

ASSESSMENT

GOAL OF ASSESSMENT

Track written communication skills across food science-related tracks in the FSHN program

POTENTIAL BENEFITS OF ASSESSMENT

Improve student learning by evaluating strengths and weaknesses across classes

Assessment is needed for undergraduate program approval from the Institute of Food Technologists (IFT)*

*Benefits of IFT-approved programs:

- Recruit and retain students within an internationally-recognized program
- Employers often recruit from IFT-approved programs
- Students are eligible for IFT scholarships and awards



ASSESSMENT TOOLS

Table 3. Partial snapshot of rubric

Criteria	Excellent (9 - 10)	Strong case (7 - 8)	Capable (5 - 6)
Introduction	Argument for proposal is excellent, with insightful connections between existing literature and current experiment. More than adequate peer-reviewed references used to back up need and purpose. Purpose well stated.	Argument is concrete with connections between literature and purpose. Proper use of adequate peer-reviewed references; some background information missing. Purpose well stated.	Argument is understandable with adequate references used. Connection between citation & topic not clear. Purpose not clearly stated.

Full rubric available at: <http://go.hawaii.edu/JSS>



ASSESSMENT

Common Written Communication Rubric

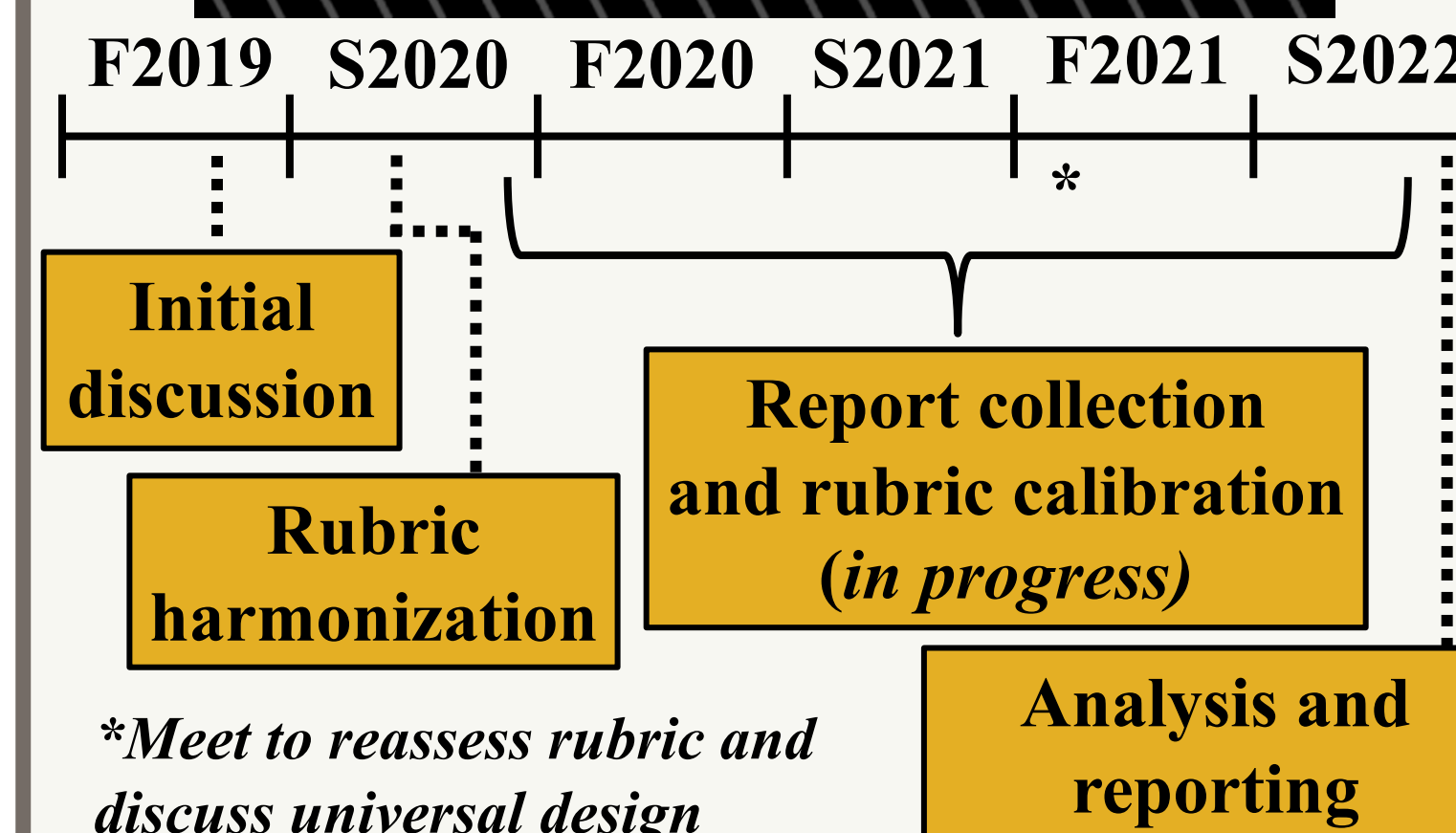
- One rubric was selected and refined (Table 3)
- Rubric evaluates report sections and mechanics/syntax with descriptive benchmarks: Limited (0-2), Developing (3-4), Capable (5-6), Strong Case (7-8), and Excellent (9-10).

CHALLENGES

Due to COVID-19 faculty decided to delay rubric calibration and data collection:

- Laboratory activities were converted to online or hybrid formats
- Faculty will determine if existing rubric aligns with online teaching activities or if a shared alternative rubric should be developed (universal design)

TIMELINE & FUTURE WORK



ACKNOWLEDGEMENTS

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