

Program Assessment Report
MS Food Safety
University of Arkansas

1. Department Name & Contact Information

Dale Bumpers College of Agricultural, Food and Life Sciences

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2. Program Mission

The mission of this program is to expand the knowledge base and skill set of experienced food safety professional working in the industry to prepare them for higher positions in their field.

3. Program Goals

1. Identify the important pathogens and spoilage microorganisms in food and the conditions which they are controlled, inactivated, grow or made harmless.
2. Analyze case studies to determine how food contamination occurs and develop preventative strategies that reduce the risk of illness associated with food contamination.
3. Understand how government regulations are developed and enforced and where to find various government food regulations that address the safe production of food.
4. Apply and incorporate both current principles and information on food safety and theoretical information to solve problems in practical, real-world situations.
5. Recognize the involvement of sanitation in food quality assurance and management programs (HACCP, GMPs, SOPs, etc.) and how it effects safe food production.
6. Understand the basic principles and practices of cleaning and sanitation in food processing operations.
7. Identify the etiological factors associated with common foodborne diseases and explain the epidemiological process in the investigation and reporting of disease and disease causation.
8. Explain absorption, metabolism, and excretion of toxicants in foods.
9. Communicate comprehensive food safety information to others that allows them to assimilate and utilize this knowledge in their field.

Student Learning Outcomes

1. Students will have the ability to write for a range of audiences using a clear, evidence-based, and concise synthesis of information to convey results, implications, and contributions to their field of study.

2. Students will have the ability to prepare and deliver oral presentations that are appropriate for a range of audiences and conveys a clear, relevant, evidence-based, and memorable message.

3. Through the Special Problems experience, students will demonstrate the ability to apply and incorporate both current and theoretical information on food safety to solve problems in practical, real-world situations.

Means of assessment

1. A mean rubric score for each rubric must be 2 for the written special problem paper and 2.7 for the special problem oral presentation to receive a passing decision.

Student Learning Outcome 1. Students will have the ability to write for a range of audiences in a clear, scientifically sound and concise synthesis of information conveying results, implications and contributions to their field of study.

A. Assessment Measure

1. **Direct measures:**
 1. Assessment of written special project paper
 2. Assessment of oral presentation of special project
2. **Key personnel:** committee members for each student; committees are comprised of graduate faculty

B. Acceptable and Ideal Targets (not required for indirect measures).

1. It is acceptable that 75% of all students perform at a satisfactory (2.5) or higher level in the subject area portion of the rubric; it is ideal that 95% of all students perform at a satisfactory (2.5) or higher level in the subject area portion of the rubric.

Student Learning Outcome 2. Students will have the ability to prepare and deliver an oral presentation that is appropriate for a range of audiences and conveys a clear, relevant, scientifically-sound and memorable message

A. Assessment Measure

a. Direct measures:

1. Assessment of oral presentation of special project (see attached rubric)
2. **Key personnel:** graduate studies committee members; committee members for each student; committees are comprised of graduate faculty

B. Acceptable and Ideal Targets (not required for indirect measures).

Oral communication:

1. It is acceptable that 75% of all students perform at a satisfactory or higher level in oral and written communication; it is ideal that 95% of all students perform at a satisfactory or higher level in oral and written communication.

Student Learning Outcome 3. Through the Special Problems experience, students demonstrate the ability to apply and incorporate both current principles and information on food safety and theoretical information to solve problems in practical, real-world situations.

Assessment Measure for Outcome 3

Acceptable and Ideal Targets (not required for indirect measures).

- Acceptable: 70% of students presenting their Special Problems paper will score “proficient” or greater.
- Ideal: All of the students presenting their Special Problems paper will score “proficient” or greater.

Key Personnel (who is responsible for the assessment of this measure).

- Graduate advisory / special problem examination committee is the responsible party.

C. Summary of Findings

Student Learning Outcome 2. Students will have the ability to prepare and deliver an oral presentation that is appropriate for a range of audiences and conveys a clear, relevant, scientifically-sound and memorable message

During the 2022-2023 academic year 9 students completed this program. Each student wrote a Special Problems paper and presented this paper to their committee. Committee members evaluated both the written work and each student’s oral communication skills. The committee members determined that all students produced an acceptable Special Problems paper. Further, the committee members scored all students as proficient or greater on oral communication skills.

D. Recommendations (not required for indirect measures)

5. Overall Recommendations

Students in this program frequently find the Special Problem requirement a roadblock to completing their degree. Faculty are interested in making changes to the program to replace the Special Problem with a capstone case study course. Faculty are currently working on building the course content for a cross-listed capstone course for this program. It is believed the course will provide structure and focus thus leading to students finishing the final project in a timelier manner. The addition of this course will result in a review of the assessment plan.

6. Action Plan

7. Supporting Attachments