

ASSESSMENT PLAN – FOOD SAFETY AND DEFENSE GRADUATE CERTIFICATE

Contact Person(s) for the Assessment Plans

Dr. Kelly J.K. Getty
216 Call Hall
Manhattan, KS 66506
Phone: 785-532-2203
E-mail: kgetty@ksu.edu

Certificate Program

Graduate Certificate in Food Safety and Defense

Assessment of Student Learning Three-Year Plan

Student Learning Outcome(s)

To earn the certificate, students will demonstrate:

1. Understanding of the multi-faceted areas that are affected by food safety and defense issues and events.
2. Ability to apply in real-world situations the scientific principles of microbial and chemical risks as they relate to food safety and defense issues.
3. Ability to apply the concepts of HACCP (Hazard Analysis Critical Control Point) programs, as well as other safety and defense programs, in the food continuum and their role in food safety and defense.
4. Evidence that they can advance the knowledge, understanding, and appreciation of food safety and defense issues in the food industry.

Relationship to K-State Student Learning Outcomes

Program SLOs	University-wide SLOs (Graduate Programs)			Program SLO is conceptually different from university SLOs
	Knowledge	Skills	Attitudes and Professional Conduct	
1. Understanding of the multi-faceted areas that are affected by food safety and defense issues and events.	X		X	
2. Ability to apply in real-world situations the scientific principles of microbial and chemical risks as they relate to food safety and defense issues.	X	X		
3. Ability to apply the concepts of HACCP (Hazard Analysis Critical Control Point) programs, as well as other safety and defense programs, in the food continuum and their role in food safety and defense.	X	X		
4. Evidence that they can advance the knowledge, understanding, and appreciation of food safety and defense issues in the food industry.	X	X	X	

How will the learning outcomes be assessed? What groups will be included in the assessment?

Graduate Certificate Program SLOs	Measures used in the assessment of SLO	Direct measure	Indirect measure	Who will be assessed
1. Understanding of the multi-faceted areas that are affected by food safety and defense issues and events.	Completion of FDSCI 630 A Multidisciplinary Overview of Food Safety and Security	The course involves over 15 guest lecturers that cover the multi-faceted areas of food safety and defense. A quiz is given at the end of each lecture topic. A Final Exam also is given.	A designated faculty member will administer an exit interview and self-assessment survey at the completion of the certificate.	All students in the program.
2. Ability to apply in real-world situations the scientific principles of microbial and chemical risks as they relate to food safety and defense issues.	Completion of FDSCI 600 Microbiology of Food and FDSCI 690 HACCP	Each course discusses real-world situations as related to food safety and defense. The faculty teaching these courses will evaluate this outcome through written essay exam questions.	A designated faculty member will administer an exit interview and self-assessment survey at the completion of the certificate.	All students in the program.
3. Ability to apply the concepts of HACCP (Hazard Analysis Critical Control Point) programs, as well as other safety and defense programs, in the food continuum and their role in food safety and defense.	Completion of FDSCI 690 HACCP	During the course lectures exams are given to evaluate ones understanding of the HACCP principles and a Final project is the development of a HACCP plan for a specific food product. In addition, other food safety programs are taught and evaluated through exams.	A designated faculty member will administer an exit interview and self-assessment survey at the completion of the certificate.	All students in the program.
4. Evidence that they can advance the knowledge, understanding, and appreciation of food safety and defense issues in the food industry.	Successful completion of the core courses and additional elective courses.		A designated faculty member will administer an exit interview and self-assessment survey at the completion of the certificate.	All students in the program.

When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?

Graduate Certificate Program SLOs	Year 1 (2007-2008)	Year 2 (2008-2009)	Year 3 (2009-2010)	Discussion group(s)
1. Understanding of the multi-faceted areas that are affected by food safety and defense issues and events.	X	X	X	Course instructors, students, and participating faculty members.
2. Ability to apply in real-world situations the scientific principles of microbial and chemical risks as they relate to food safety and defense issues.	X	X	X	Course instructors, students, and participating faculty members.
3. Ability to apply the concepts of HACCP (Hazard Analysis Critical Control Point) programs, as well as other safety and defense programs, in the food continuum and their role in food safety and defense.	X	X	X	Course instructors, students, and participating faculty members.

What is the unit's process for using assessment results to improve student learning?

Based on student and faculty requested input, current courses will be evaluated and revised as appropriate. The self-assessment survey will be developed and administered as related to the learning outcomes. Information from evaluation of the courses, discussion with faculty, and students' self-assessment survey will be used to determine what new courses need to be added to the elective offerings and what material needs to be added to the core courses to improve the certificate program.