



PA FFA Food Science & Technology

Virtual CDE



Chairperson Information

CDE Chairperson	Adam Serfass and Jeremy Deysher -Special Assistance from Dr. John Coupland and Penn State Food Science Department
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Basic Virtual CDE Guidelines

Event Type: Teams and Individual (a student competing individually would not complete the team components of the CDE)	# of Team Members: 4
<p style="text-align: center;"><u>Individual Materials List</u></p> <ul style="list-style-type: none"> • Electronic Device with Wifi/Internet Access (Laptop or IPAD preferred) • Non-programmable calculator • Sharpened Pencils or Pens 	<p style="text-align: center;"><u>Group Materials List</u></p> <ul style="list-style-type: none"> • Current Plan: We are going to run a modified virtual team event. All materials for Product Development would be mailed to the teams as part of the “CDE in a Box.” • Teams would be responsible for supplying scales, measuring cups and spoons.
<p><u>Pre-Event CDE Expectations</u></p> <ul style="list-style-type: none"> • Individual students and teams should review the National FFA Food Science & Technology CDE Handbook, as well as the posted PA FFA Food Science & Technology resources. • Teams of 4 should practice and prepare for a modified product development during the competition. Teams will present, virtually, to a panel of judges at a time to be determined. 	

Virtual CDE/LDE Rules

CDE Component	Points	Component Description	Virtual Platform
Individual: Objective Test/Exam	150	The exam will have 50 questions, each valued at 3 points. Participants will have a maximum of 60 minutes.	Online via Google Forms
Team Activity: Food Safety/Sanitation	100	Each team will be given a situation, the team will work together to evaluate the situation and complete a safety/sanitation	Contest chairmen can prepare a scenario that the team sees on a Google Form/link. We

		<p>report evaluation that will include observations, degree of concern and recommendations/corrective actions. (80 points)</p> <p>Students will be evaluated on teamwork as well as their safety/sanitation report. Students will complete a Google Form survey to explain how the team worked together. (20 points)</p>	<p>anticipate using Google forms for completing the report.</p>
<p>Individual: Problem Solving/Math Practicum</p> <p>Students are permitted to use a non-programmable calculator during this activity.</p>	25	<p>Participants will answer a series of five mathematical calculations based on common food science themes. Questions may include nutrition calculations, ingredient quantity, cost benefit analysis, estimation of cost/margin of goods sold, conversions, processing conditions, etc.</p>	<p>Online via Google Forms</p>
<p>Individual: Food Safety and Quality Practicums: Customer Inquiry and Product Specification Compliance</p>	50	<p>Customer Inquiry: Five scenarios representing general consumer inquiries. Participants must determine if the consumer inquiry reflects a quality or safety issue (two points per scenario) and determine if it is a biological, chemical or physical concern or hazard (three points per scenario). This is for a total of 25 points.</p> <p>Product Specifications: Students will be given sample sets (actual products and/or data sets) and will be responsible for determining compliance with the provided specification requirements. Participants will be asked five questions regarding potential compliance violations presented within the sample set. (25 points)</p>	<p>Online via Google Forms</p>
<p>Sensory Analysis: Triangle Tests and Aroma Identification</p>	40	<p>Students conduct 4 different triangle tests to identify the different foods. Students identify 4 different aromas from the list of potential aromas available from National FFA Food Science & Technology CDE.</p>	<p>Students/Teams that are pre-registered will be mailed a "CDE in a Box" that contains the 4 triangle tests and aromas. Students will enter their answers into a coded Google Form</p>

Causes for Disqualification: Teams and/or individuals will not be permitted to use electronic media (cell phones, mp3s, cameras, etc.) during the event, unless approved by the event chairmen. Students may not access any event resources while participating in any of the event components.

Tie-breaker: Individual: Objective Test, Food Safety and Quality
Team: Team Food Safety/Sanitation, Combined objective test score

Resources

EXAM REFERENCES

- Principles of Food Science. 4th edition. 2015. Janet Ward and Larry Ward. The Goodheart-Willcox Company, INC.
- Principles of Food Sanitation. 5th Edition. 2006. Norman G. Marriott and Robert B. Gravani, Springer Science + Business Media, Inc.
- Institute of Food Technology website, <http://www.ift.org>
- USDA Food Safety and Inspection Service website, <http://www.fsis.usda.gov>
- US Food and Drug Administration, <http://www.FDA.org>

GENERAL REFERENCES

- Penn State Kitchen Chemistry: Experiments, resources and materials for educators and students, <http://foodscience.psu.edu/public/kitchen-chemistry>
- Food Safety Education, http://www.fsis.usda.gov/food_safety_education/for_kids_&_teens/index.asp
- Partnership for Food Safety Education, <http://www.fightbac.org>
- FoodSafety.gov, <http://www.foodsafety.gov>