

FFA Food Science and Technology CDE 2011

Food Science Exam (300 pts)

The 50 questions for the objective test were taken from the following references: Food Science, Safety, and Nutrition, Food Science and Safety, 1998, by Seperich; Principles of Food Sanitation, 4th ed. 1999, by Marriott; and from backgrounder articles from the Institute of Food Technologists website.

Product Development (100 pts each 400 per team)

Each team will have 60 minutes to respond to a marketing scenario and reformulate or develop a new product, calculate a nutrition label, develop the ingredient statement and education panel, and develop the front or principal display panel to reflect the product and its market. Then, each team member will contribute in a 10 minute description of the new product to judges. A 10 minute Q&A session follows. The oral presentation should address the following: How does the new product meet market needs? How does product address the target audience? The presentation should address economics, nutrition, quality control, health, equipment, ethnicity, and formulation. (Total time = 80 minutes).

Sensory Evaluation (150 pts)

Triangle Test. Each contestant will be seated at a partitioned booth, and served a plate containing 3 samples identified by a 3 digit code. Two of the samples will be identical, and one will be different in some way (flavor, texture, appearance, and odor). The contestant will be asked to circle on their ballot the code number for the sample that is different. After the contestant has identified the odd sample in the first plate, 2 more plates and ballots will be served (3 Triangle Tests per contestant; total of 45 points).

Comparison Test. This test will have 1 reference sample and 1 coded unknown sample. For each unknown sample, the contestant will be asked to identify the difference between the unknown sample and the reference or control one. Differences will be mainly on flavor. (3 Comparison Tests per contestant; total of 45 points).

Aroma Identification. Four unknown samples will be placed at different locations around the room. Contestants will be given the opportunity to smell each sample and identify each sample, from a list of 31 possible samples. This portion is worth 60 points.

Food Safety and Quality (150 pts)

The Food Safety and Quality Practicum consists of a response to a typical customer complaint letter and identification of potential food safety or sanitation problems, as represented in 10 different photos. For the customer complaint letter, the contestant will be given 15 min to determine if the complaint involves a food quality and/or safety problem (25 points) and describe a possible solution (25 points). In the 2nd part, contestants will be shown 10 photos of potential food safety or sanitation problems. Contestants will have 1 minute to view each photo and record the problem, using the number on the list of 25 possible problems. Each photo is worth 10 points.

Total Score 700 Points per individual

FFA Food Science and Technology CDE Exam Instructions

<i>School</i>	<i>Team #</i>	<i>1:30 pm</i>	<i>School</i>	<i>Team #</i>	<i>Comp Lab</i>
Am Fork	1	NFS Bldg	Mt Crest	11	NFS Bldg
Bear R.	2	NFS Bldg	Mt. Nebo	12	NFS Bldg
Carbon	3	NFS Bldg	Pl. Grove	13	Ag Science 117
Delta	4	NFS Bldg	S. Fork	14	Ag Science 117
Desert Hills	5	NFS Bldg	Tabiona	15	Ag Science 117
Gunnison	6	NFS Bldg	Toole	16	Ag Science 117
Layton	7	NFS Bldg	Unitah	17	Ag Science 117
Lehi	8	NFS Bldg	Wasatch	18	Ag Science 117
Manila	9	NFS Bldg	West Lake	19	Ag Science 117
Morgan	10	NFS Bldg		20	Ag Science 117

Teams 1-12 will begin the CDE at the Nutrition and Food Sciences Building. Teams 13-20 will begin at the computer lab located at Ag Science 117-119. Please arrive 15 minutes earlier to be prepared to start. Exam takers should find a computer and log in before the start time. The exam time is 1 hour. Delays will reduce the time you have to complete the exam.

Login procedure:

The Computer lab supervisor should have already logged your computer on. If not, please contact ASAP to get you access.

1. Click the internet browser icon and go to <http://www.bb.usu.edu>
2. Log into Blackboard using username = FFA __ - __ .

(Case sensitive). Blanks correspond to Team No. ____ and Student No. ____ . Choose student 1-4 between your team members.

3. The password is identical to the username. Once logged into Blackboard choose the only course available called Food Science and Food Safety.
4. Select the FFA Exam link.
5. There are 49 Food Science questions and 6 survey questions.
6. Click the circles to select an answer.
7. Click “save answer” to retain that answer. Failing to save answers as you move along may result in lost data due to computer glitches, etc.
8. After completing all questions select the button that says “finish”.

The computer will grade your exam and immediately present your score (out of 300 points). When finished please go to the NFS building for your next portion of the event. You have 15 minutes to get there.

TM	1:30 PM	1:45 PM	2:00 PM	2:15 PM	2:30 PM	2:45 PM	3:00 PM	3:15 PM	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM
1		PD - 317			O - 211			Exam Ag Sci 117-119				S 207F		CL 248A	PID 243		
2		PD - 319			O - 248G			Exam Ag Sci 117-119				S 207F		CL 248A	PID 243		
3		PD - 323			O - 214			Exam Ag Sci 117-119				S 209		PID 243	CL 248A		
4		PD - 326				O - 211		****Exam NFS 207F****				S 209		PID 243	CL 248A		
5	S 207F		PD - 328		O - 248G		PID 243	CL 248A						Exam Ag Sci 117-119			
6	S 207F		PD - 330		O - 214		PID 243	CL 248A						Exam Ag Sci 117-119			
7	S 209		PD - 3rd floor commons				O - 211	PID 243		CL 248A				Exam Ag Sci 117-119			
8	S 209		PD - 207F				O - 248G	PID 243		CL 248A				Exam Ag Sci 117-119			
9	CL 248A		S 207F		PD - 317		O - 211	PID 243						Exam Ag Sci 117-119			
10	CL 248A		S 207F		PD - 319		O - 248G	PID 243						Exam Ag Sci 117-119			
11	PID 243		S 209		PD - 323		O - 214			CL 248A				Exam Ag Sci 117-119			
12		PID 243	S 209		PD - 326		O - 211			CL 248A				Exam Ag Sci 117-119			
13	Exam Ag Sci 117-119		S 207F		PD - 328		PD - 328					O - 211	PID 243	CL 248A			
14	Exam Ag Sci 117-119		S 207F		PD - 330		PD - 330					O - 248G	PID 243	CL 248A			
15	Exam Ag Sci 117-119		S 209		PD - 3rd floor commons		PD - 3rd floor commons					O - 214			PID 243		CL 248A
16	Exam Ag Sci 117-119		S 209		PD - 207A		PD - 207A						O - 248G		PID 243		CL 248A
17	Exam Ag Sci 117-119		PD - 205		O - 248G		PID 243	CL 248A						S 207F			
18	Exam Ag Sci 117-119		PD - 207		O - 214		PID 243	CL 248A						S 207F			
19	Exam Ag Sci 117-119		PD - 118 C				O - 211	PID 243						S 209			CL 248A
20	Exam Ag Sci 117-119		PD - 118 D				O - 248G	PID 243						S 209			CL 248A

Looking for a Career in Applied Science? Consider Food Science!



Great Salaries and Career Opportunities. Is it your ambition to be a biologist, microbiologist, chemist, or engineer? We can help you realize that dream through a challenging and rewarding career in Food Science. Our BS-level graduates enjoy high starting salaries (\$46,000/yr or more for people with 0-1 year experience), excellent placement opportunities, and great geographic flexibility. Within the last five years, Utah State University Food Science graduates have found employment locally and across the US in major companies like Kraft, General Mills, Glanbia Foods, and Nestle. Our students are

accepted into graduate programs throughout the United States.

What is Food Science? Everyone needs to eat, and Food Scientists are vital to the development of new wholesome and innovative food products. Professionally, Food Scientists are applied scientists who use specialized knowledge of biology, chemistry, and engineering to provide innovations in food manufacture, processing, packaging, and storage. The Food Science program at Utah State University is accredited by the Institute of Food Technologists (IFT), and is the only publicly accessible program of its type in Utah. Our faculty are internationally recognized for their cutting-edge research and take great pride in their commitment to undergraduate and graduate student education.

Excellent Scholarship Opportunities. In addition to the general scholarships available through Utah State University, the Food Science Program at Utah State University offers 10 half-tuition scholarships annually to new Food Science undergraduate majors. Scholarships are also available for continuing Food Science undergraduates.



What is it like to study Food Science at USU? Unlike many college degrees, the undergraduate Food Science program at USU is designed to make you feel welcome right away. Students take at least one Food Science course every semester, which helps you quickly become familiar with faculty and classmates. Student-faculty interaction is also encouraged through the Food Science Club, which, in addition to social activities, gives undergraduates the opportunity to participate in local, regional, and national professional meetings and competitions. Another unique aspect of our curriculum is the student internship, which provides “real-life” work experiences that help secure rapid employment after graduation, as well as a salary! Students can also gain hands-on experience working in the department’s Dairy Processing, Meat Processing, or Sensory Evaluation Laboratories. Many undergraduates also find part-time research positions working with faculty in our research laboratories.



To learn more... about our program or to obtain a scholarship application, visit us on the web at nfs.usu.edu or call (435) 797-2114 and set up an appointment with our peer advisor.

Come Discover the Food Science Program at Utah State University