

As part of our program approval from the Institute of Food Technologists (IFT), the food science program develops a five year plan for assessment. Each year the program picks up to three courses or program objectives to evaluate. We received a program re-approval in March of 2017. Our five years assessment plan is listed below.

Table 1. Five-year assessment plan

| | Outcome 1 | Outcome 2 | Outcome 3 | Faculty Assessors |
|-----------|--|--------------------------------------|----------------------|--------------------|
| 2016-2017 | (PO-SS) Written Communication | (CO) Food Laws and Regulations | | Ward, Walsh |
| 2017-2018 | (PO-AFS) Application of basic statistical skills | (PO-FSM) Control microbes in food | (CO) Cereal Science | Walsh, McMahon |
| 2018-2019 | (PO-FCA) Controlling chemical changes in food | (CO) Dairy Technology and Processing | (CO) Food Analysis | McMahon, Martini |
| 2019-2020 | (PO-FE) Principles of Processing Techniques | (CO) Product Development | (CO) Meat Technology | Martini, Carpenter |
| 2020-2021 | (PO-SS) Critical Thinking | (CO) Food Engineering | (CO) Food Chemistry | Carpenter, Ward |

Abbreviations: PO (Program Outcome), CO (Course Outcome), SS (Success skill), AFS (Applied Food Science), FSM (Food Safety and Microbiology), FCA (Food Chemistry and Analysis), FE (Food Engineering).

In the 2016-2017 academic year, we evaluated one course outcome (Food Laws and Regulations) and one program outcome (Written Communication). For each item evaluated the following is provided: Outcome measured, method of assessment and data analysis, summary of key findings and actions being taken based on the findings.

| OUTCOME MEASURED | Course Learning Outcomes: NDFS 5510, Food Laws and Regulations |
|------------------|--|
| | <p>We measured three objectives. They are listed below along with the Bloom's Taxonomy level.</p> <p>At the completion of the course, students are expected...</p> <ol style="list-style-type: none"> 1) <i>To recognize that food laws and food regulations in essence control all aspects of foods from farms, transport, research and development, processing, packaging, marketing, and distribution. It is anticipated that these controls will become more important in the future. (I)</i> 2) <i>To explain the complexity of the federal and state systems that regulate the processing, packaging, distribution, safety, and nutritive value of the food supply, especially with respect to the U.S. Food and Drug Administration, the U.S. Department of Agriculture, the Environmental Protection Agency, and the Federal Trade Commission. (II)</i> 3) <i>To state what food processors, inspectors, and the agencies that employ them can and cannot do under the principal laws and regulations that apply to them. (III)</i> |

| Method(s) of Assessment | <p>Each objective was assessed through performance on embedded homework assignments and a test question. Student responses to these questions were extracted from the homework and exams and evaluated on a simple 4 point rubric (4=excellent, 3=very good, 2=good, 1=poor). Our expectation was that the average would be > 2.5.</p> <p>The homework questions and test questions, student responses and evaluation for objective #2 are reproduced in Appendix A.</p> | | | | | | | | | | | | | | | | |
|---|---|-------------|---------------|-------------|---------------|-----|------|---|------|-----|------|------|------|-------|---|------|------|
| Summary of Key Findings | <p>The average for all homework and test questions were above our acceptable level of 2.5 (out of a four point scale).</p> <table border="1"> <thead> <tr> <th>Objective</th><th>Homework #1</th><th>Homework #2</th><th>Test question</th></tr> </thead> <tbody> <tr> <td>One</td><td>3.67</td><td>3</td><td>3.33</td></tr> <tr> <td>Two</td><td>3.41</td><td>3.50</td><td>3.13</td></tr> <tr> <td>Three</td><td>4</td><td>3.94</td><td>3.75</td></tr> </tbody> </table> <p>The data are shown in graphical form in Appendix A along with example of student responses to Objective two.</p> | Objective | Homework #1 | Homework #2 | Test question | One | 3.67 | 3 | 3.33 | Two | 3.41 | 3.50 | 3.13 | Three | 4 | 3.94 | 3.75 |
| Objective | Homework #1 | Homework #2 | Test question | | | | | | | | | | | | | | |
| One | 3.67 | 3 | 3.33 | | | | | | | | | | | | | | |
| Two | 3.41 | 3.50 | 3.13 | | | | | | | | | | | | | | |
| Three | 4 | 3.94 | 3.75 | | | | | | | | | | | | | | |
| Actions Being Taken Based on these Finding | We are satisfied with the performance of the students on the three main objective for this course as assessed using this embedded question method. At this point we do not plan to make any adjustments to either the content or delivery of this course. However, we are also in the process of surveying our alumni to evaluate how our curriculum has prepared them for their careers. If we find out that there are aspects of food laws and regulations that they were not prepared for, we will revisit the curriculum for this course. | | | | | | | | | | | | | | | | |
| OUTCOME MEASURED | Program Learning Outcome: Written Communication | | | | | | | | | | | | | | | | |
| Method(s) of Assessment | <p>To evaluate the program level outcome of <i>written communication</i>, we used assignments from across our curriculum. Our course levels range from 1000 (typically freshmen course) to 5000 (upper division). As with most food science programs, the majority of our courses are upper division, as students spend ~2 years on prerequisites in courses in other departments. In our evaluation of written communication, we used a book report from a lower division class (1000 level), a technical paper from an upper division class (Food Chemistry), lab reports from an upper division class (Food Analysis) and finally, the capstone report from Product Development, which is typically taken in the fall of senior year.</p> <p>Writing samples were evaluated using a 4 point rubric, using the basic standard of 1=poor, 2=fair, 3=good, 4=excellent. <i>A priori</i>, our expectation is that our students would average > 2.7.</p> | | | | | | | | | | | | | | | | |

| | |
|---|---|
| Summary of Key Findings | <p>In the lower division class, the average score was 1.65. This is below the expected level. In the three upper division courses, the averages were 2.99, 3.00 and 3.24. A figure with the data is presented in Appendix A.</p> <p>Each reviewer also provided comments on the assignments. In the low division papers, there were several negative features of the students writing. First, several of the papers were not clearly structured. Second, the grammar was often poor. Last, they tended to be written in an unacceptably informal manner. As these samples were taken from a lower division class, it is not surprising that the scores were lower, and the writing of lower quality. In fact, since most of the students were freshmen, their writing does not reflect instruction they have received at Utah State. Yet, the reviewers agreed it was good to have a baseline writing sample.</p> <p>The assignment for NDFS 5560 (Food Chemistry) was a technical paper on an item of interest to food chemistry. While the writing was more organized and the grammar better, there were still several areas that the reviewers feel can be improved upon. For example, many students did not use headings to set apart different sections. The overall impression the reviewers took from these papers is that they were more akin to essays from an English class, than they were from a report in a science class. The reviewers had the same impression from the lab reports from food analysis.</p> <p>The last writing sample evaluated was the capstone project for Food Product Development. In general, this was the best writing, although it was not entirely free from grammatical errors. These papers were structured the best, which may be because students are required to submit a first draft.</p> |
| Actions Being Taken Based on these Finding | <p>After reviewing writing samples from across our curriculum, we were pleased to see that the quality improved from freshman to senior year, and also satisfied that the average for upper division courses was >2.7. That said, we found three areas the need improvement, and have formulated a plan address these concerns.</p> <p>First, our students often write in a narrative, essay style, even in lab reports. Perhaps this is not surprising, as we do not actually give instruction in technical writing. Therefore, we have contacted an employee from the USU writing center who specializes in science writing. She will be visiting the first upper division class our students take (Food Chemistry). From this visit, we anticipate that students will be given explicit instruction in the mechanics of science writing. Next, the writing assignment in this course has been modified so it is of a more technical nature. The assignment will then be evaluated using criteria derived from the instruction in science writing..</p> <p>The second concern with student writing in our program is grammar. While we do not explicitly teach grammar, we often do not enforce grammar standards in course papers and lab reports. Therefore, we agreed as a faculty to assess points for poor grammar, and to compel students to work harder at using it.</p> <p>Last, our students need to work on structuring writing for clarity. Thus, in both the food chemistry and food product development papers, we will have students turn in a first draft earlier in the semester that will be critiqued by the professor. A focus will be placed on clarity, and the structure of the paper.</p> |

II. MULTI-YEAR ASSESSMENT PLAN

In the space below, provide details of the assessment activities planned for the years up to your program's 5-year program renewal. Expectations are that all outcomes will be assessed within the 5-year period. The information can be presented in any format but the use of a Gantt chart may be useful.

Our program received 5 year re-approval in 2017. Below is the assessment plan we submitted in the application.

Table 1. Five-year assessment plan

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|-----------|--|--------------------------------------|----------------------|---------------------------|
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| 2020-2021 | (PO-SS) Critical Thinking | (CO) Food Engineering | (CO) Food Chemistry | Carpenter, Ward Chemistry |

Abbreviations: PO (Program Outcome), CO (Course Outcome), SS (Success skill), AFS (Applied Food Science), FSM (Food Safety and Microbiology), FCA (Food Chemistry and Analysis), FE (Food Engineering).

2017-2018

In 2017-2018 we will assess two POs and one CO. The first PO will be in the area of Applied Food Science, and will involve assessing the capacity of students to use basic statistics tests on data collected in laboratories. In the last few years several faculty have noted that students are often weak in their ability to determine which basic statistics test to use, and how to use them. Thus, starting in 2017 we provide instruction in the application of statistics tests in three courses, and subsequently assess student competency using laboratories from these classes. Below is a list of the three courses, and cognitive domain depth and level.

| | | | | |
|-----------|---|------------------|------------------|------------------|
| 2017-2018 | Application of basic statistical skills | NDFS 5560 C-3 | NDFS 5500 C-3 | NDFS 5100 D-5 |
|-----------|---|------------------|------------------|------------------|

Our students take statistics in the spring of the sophomore year in a course taught by the Department of Math and Statistics. In the following fall of their junior year, our students take NDFS 5560 (Food Chemistry), and they take NDFS 5500 (Food Analysis) and NDFS 5100 (Sensory Evaluation of Food) in the spring. In Food Chemistry, the emphasis is mostly on qualitative data collection. Yet, there are several labs in the class where data is collected in two groups of samples, which can be used for a basic statistics test. Food Analysis has a strong emphasis on precision and accuracy, and students are given in depth instruction in data handling. However, traditionally emphasis has not been placed on statistics. In this class, there are many opportunities for the application of basic statistics tests. According to our Core Competency map, which starts on Page 7, Application of Basic Statistical Skills is 'covered to some extent' in Food Chemistry and Food Analysis at level three of Bloom's Taxonomy, which corresponds to 'Application.' Starting, in Food Chemistry, students will be reminded of the basics of the Student's T-Test and will perform the test with data collected in lab. In addition, a question will be added to a course exam regarding the use and interpretation of the T-test for a simple comparison.

In Food Analysis, students will once again be given instruction in the T-Test and also in a one way analysis of variance. There are many labs in this course where data is collected that may be compared. Laboratory reports from the beginning and end of the semester will be collected and evaluated for the proper application of both statistics tests. In both Food Chemistry and Food Analysis, laboratory reports and exam questions will be evaluated on a simple 4-point rubric (4-excellent, 3-good, 2-fair, 1-poor). Our expectation is that the average will be >2.5. Excellent will correspond to a correctly performed test, with correction

interpretation of the data. A good score will correspond to a test that is either incorrectly performed or incorrectly interpreted. A fair score will be given in situations where the application and interpretation are incorrect.

In Sensory Science, this core competency is covered in 'Depth' at level 5 (Synthesis). Statistics is an important of this course, and it is evaluated in lab reports, quizzes, and exams and in the final report. To assess student outcomes, at least two labs, a midterm or final, and the final report will be assessed. Using a four-point rubric, we will assign excellence (4 points) for students who correctly identify which test to use, and who use and interpret it properly. A good score (3 points) will be given in situations where the tests are either performed incorrectly or incorrectly interpreted. A fair score (2) will be given for students who cannot select the correct test, or who are not able to correctly interpret the results and significance.

In 2017-2018 we will assess a second PO, Controlling Microbes in Food. This outcome will be assessed across three courses that span our curriculum. Students typically take NDFS 3110 (Food, Technology and Health) in the fall of their sophomore year, and NDFS 1250 (Sanitation and Safety) in the spring. NDFS 5110 (Food Microbiology) is taken in the spring of the junior year, and NFDS 5030 (Dairy Technology and Processing) is taken in the fall of their senior year. The courses and cognitive domains and depth of coverage are listed below.

| | | | | |
|-----------|-----------------------------|-----------|-----------|-----------|
| 2017-2018 | Control of microbes in food | NDFS 3110 | NDFS 1250 | NDFS 5110 |
| | | C-3 | I-1 | D-4 |

In NDFS 3110, several aspects of controlling microbes are covered, albeit at an introductory level. Assessment of student learning in this class is by exam. Questions related to water activity, pH, and heat treatment, that involve controlling microbes, will be taken from the exams and the correct scores determined. We expect that student will get >80% correct.

In NDFS 1250, the level of students develop a HACCP plan for cooking ground beef. This assignment is graded on a 100-point scale. Because the assignment involves developing a HACCP plan, the course 'covers' this objective at the application level (III) of Bloom's taxonomy. The assignment grade will be used to assess student's understanding of controlling microbes, and we expect students to achieve >80%.

NDFS 5110 (Food Microbiology) is typically taken in the spring of the junior year, and is the main food safety course in our curriculum. In this course, students are given instruction in basic isolation and enumeration techniques for microbes. These learning outcomes are assessed via quizzes and exams. However, to assess student learning in controlling microbes in food, students are evaluated on fact sheets they prepare. In these fact sheets, students must convey to the general public what steps are necessary to prepare foods that are safe from pathogens. These fact sheets will be assessed at the synthesis level (level V) of Bloom's taxonomy, as the students are required to understand the nature of the food, and the types of microbes that can grow in it. In addition, they must be aware of what steps are necessary to insure the food is rendered safe, depending on what the microbe of concern might be. The fact sheets from this course will be evaluated using a standard 4-point rubric that we have outlined other places in this document. Like the others, our goal is for the average to be >2.5.

In 2017-2018 we will assess three course outcomes for PSC 4600 (Cereal Science). This course is taught by Dr. David Hole of the Plant, Soils and Climate Department at USU. The course outcomes are listed below. While they are not the only course outcomes, they were selected as they all involve aspects of cereals that make them relevant as foods and ingredients. The objectives are assessed with a mixture of assignments, group projects and lab reports.

- 1) *Students will be able to summarize the anatomical and biochemical components of the cereals grains that make them important as foods (Bloom's II).*

This outcome is assessed in the course with assignments on starch chemistry, gelatinization and dry milling. Our faculty evaluators will collect these assignments from Dr. Hole and evaluate them with a four-point rubric corresponding to: Excellent (4), Good (3), Fair (2), Poor (1). We expect that the food science students that take this course will average a 3.

- 2) *Students will be able to describe how various cereal grains biochemical components are modified physically and chemically to produce common foods (Bloom's II).*

This outcome is assessed by assignments on starch gelatinization and by a protein-starch separation lab report. Similar to outcome #1, this outcome will be assessed on a four-point scale, and we will expect our students to average a 3.

- 3) *Students will be able to predict the value of specific grains in relation to a given food production system based on accumulated knowledge of the grain functional components and different food system requirements (Bloom's III).*

This is assessed by a lactic acid retention capacity lab report which compares lactic acid retention capacity of different flours to mixograph evaluation of those flours in determining bread baking performance. This outcome will also be assessed on a four-point scale, but at a higher cognitive domain. In this case, an excellent answer (4 points) will require that students properly evaluate the relationship between the lactic acid retention capacity and mixograph results. A good score (3) will provide some understanding of the two measures, but will not assign them proper value in the food system. A fair answer will lack some understanding of the value of lactic acid retention, or the importance of mixograph results. A poor answer (1) will involve little understanding of the functionality of grains in food systems.

Analysis of data and subsequent actions

For the statistics competency, it is unclear what we will find. In faculty meetings, we have often discussed the fact that are students are not comfortable selecting and using basic tests. If we find the students do well, we will not change the curriculum. If, however, this strategy is not successful, we will formulate a new plan.

In general, our students have performed well in the past in areas related to food safety. Yet, we have not assessed the outcome across our program. We anticipate documenting a basic comprehension of how microbes are controlled with water activity, pH and thermal treatments early in the curriculum. For the upper division course, we anticipate that the students will be able to apply these treatments in new situations. If we do not find this to be the case, we will revisit the relevant sections in each class.

We do not know what to expect of our food science students in Cereal Chemistry. To our knowledge, we have not assessed learning outcomes in this course in the past. Assessment next year will give us a baseline of what to expect, and also indicate if we want to visit with our Plant Science colleague to discuss ways in which the course could be changed to improve learning outcomes in our students.

Appendix A: Data for evaluation of Program Outcome: Written Communication and Course Outcome: NDFS 5510, Food Laws and Regulations.

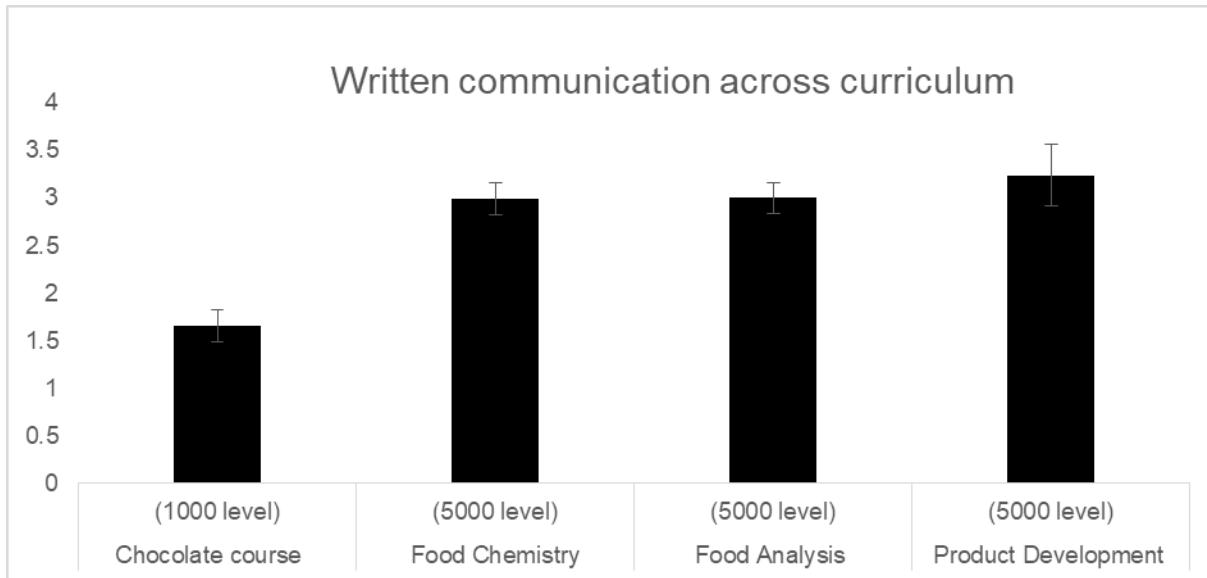
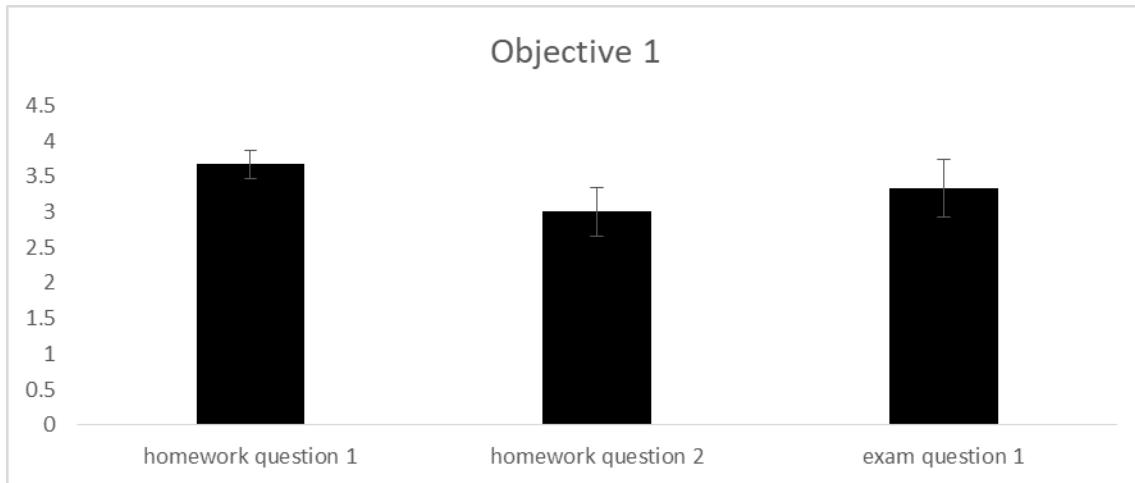


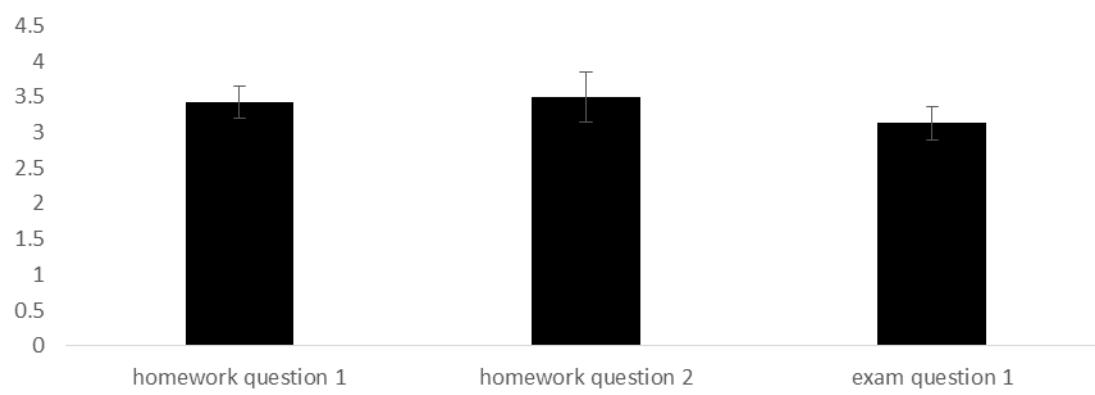
Figure 1: Scores for written communication across assignments from four courses.

Course Outcome: NDFS 5510: Food Laws and Regulations.

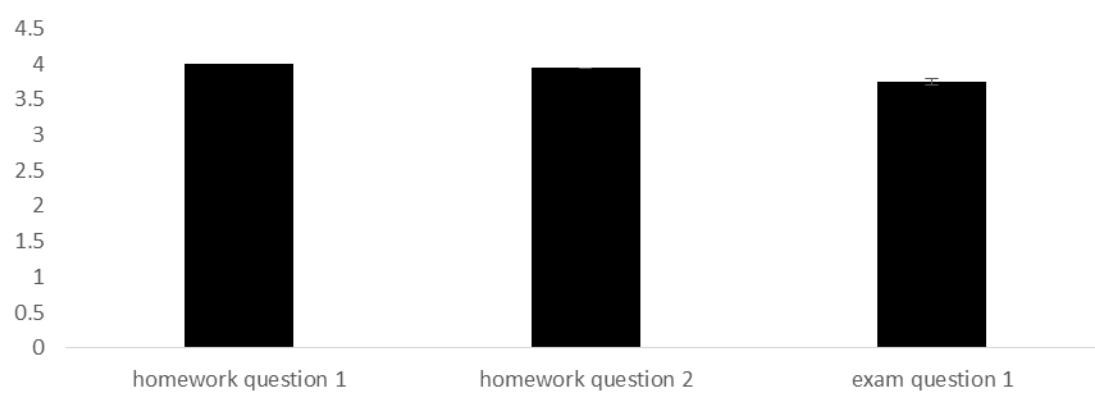
Below are the data for the two homework questions and test question for each objective. Below the data is examples of student responses to Objective 2.



Objective 2



Objective 3



Objective 2. To explain the complexity of the federal and state systems that regulate the processing, packaging, distribution, safety, and nutritive value of the food supply, especially with respect to the U.S. Food and Drug Administration, the U.S. Department of Agriculture, the Environmental Protection Agency, and the Federal Trade Commission. (Bloom's Revised Taxonomy II)

Homework Week 15. State Laws and Their Relationship to Federal Laws

Write and submit a legal brief of the court opinion *Florida Lime and Avocado Growers, Inc. v. Paul* (pp. 583-588) (Five points value.)

Write and submit a legal brief of the court opinion *Jones v. Rath Packing Co.* (pp. 594 to 600 – up to line that reads “*It is so ordered.*”). (Five points value.)

Justification of *Florida Lime and Jones* legal case studies for Objective 2:

- Both cases reached the U.S. Supreme Court to determine possible federal preemption of a state law in regulating food articles
- *Florida Lime* presents a set of facts that permits the state law to rule under the “police power” definition
- *Jones* presents two (2) different food articles under scrutiny that led to federal preemption to occur
- Student learns the interplay between and respective authorities of the federal and state regulatory agencies

Examination Question.

Question 6. (Chapter 14) Many U.S. states have adopted food regulations nearly identical to the FDA regulations and standards. If there is considerable “harmony” between the federal regulations and those of the states, why should preemption of a state law/regulation by the federal equivalent be an issue? Should there be only one set of laws/regulations (such as the FD&CA and FDA regulations) that can be “national” in scope and that would not require cooperation or collaboration between the FDA and the fifty states? Or should the federal/national laws and regulations be attenuated (i.e., reduced in authoritative power), thereby leaving more authority to regulate food facilities to the states? Or should the present system continue as it currently operates between the federal and state regulatory agencies? Justify your answer/opinion by answering “Why or Why not?”

Justification of Examination Question for Objective 2:

- Student analyzes and presents a position about federal and state regulatory authorities
- Student can discuss a state’s “police power” and the breadth of such power in regulating a food article
- Student can present current cooperative efforts between the FDA and state regulatory agencies
- Analysis and defense of answer position can mention “harmonization” (or not) of issues surrounding label/labelling of food articles
- Analogy to USDA collaborative efforts with states can be used to develop and defend an answer position

Logic: _____ of 5 pts

Information: _____ of 3 pts

Sp/Gr/Punct: _____ of 2 pts

I grade essay answers on logic, information, spelling, grammar, and punctuation.

Student 1.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Part 1--Legal Brief:

Florida Lime and Avocado Growers, Inc. v. Paul
3773 U.S. 132 (1963)

Facts: California and Florida are the main producers of avocados in the United States, Florida adheres to federal regulation regarding maturity of avocados but California law prohibits the sale of avocados which contain “less than 8 percent of oil, by weight...excluding the skin and seed.”

Issue: Does California regulation regarding avocado maturity “stand as an obstacle to the accomplishment and execution of the full purposes and objective of Congress?”

Holding: No, there is no actual conflict between federal and California regulation regarding avocado maturity and both sets of regulation can be enforced without impairing the federal superintendence of the field.

Rule: The statute does not offend the supremacy clause of the federal constitution and therefore does not “stand as an obstacle to the accomplishment and execution of the full purposes and objective of Congress.”

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the “Answer Key.”

Part 2—Legal Brief:

Jones v. Rath Packing Co.
430 U.S. 519 (1977)

Facts: Rath Packing Company, General Mills, Pillsbury, and Seaboard Allied Milling packaged bacon and flour, respectively, that when inspected had a lower average net weight than was stated on the package.

Issue: Do the federal laws which govern packing operations preclude California from enforcing section 12211, which does not allow for moisture loss in packaged foods?

Holding: Yes, the Food, Drug, and Cosmetic Act and Federal Meat Inspection Act allow for reasonable variations from the stated net weight due to the impossibility of developing completely accurate means of packaging. Because California law does not allow for moisture loss, consumers throughout the country cannot accurately obtain information as to the quantity of the contents for value comparisons.

Rule: Enforcement of section 12211 as implemented by Art. 5, would prevent “the accomplishment and execution of the full purposes and objectives of Congress.” Therefore the state law must yield to the federal law.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the “Answer Key.”

Student 2.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. V. Paul

Facts: California state law prohibits the sale of avocados with an oil content less than 8%. However Florida grown avocados follow practices to provide avocados that have reached maturity rather than oil content and often do not reach the 8% oil content at maturity.

Evaluation: Three (3) points as student brief does not indicate the federal source of the "8% oil" regulation.

Issue: Should Florida avocados have to reach the 8% oil content even though it would be past the ideal maturity point to be sold in California?

Holding: No they do not have to comply to the California state laws.

Rule: California statutes were inconsistent with the federal law and becomes preempted.

Jones V. Rath Packing

Facts: Removal of bacon and flour packaged by Rath packing was ordered by Director Jones in the state of California due to the discrepancy of weights stated on the package and the actual weights in California. Rath packing is compliant with manufacturing processes and follows federal requirements so it is likely the weights were correct at the time of packaging.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

Issue: Does the federal law or state law stand when determining if a food is meeting packaging and weight recommendations? Should the bacon and flour be removed from commerce?

Holding: The federal supersedes the state law. No the bacon and flour should not be removed as the federal law allows for discrepancy in moisture loss and humidity.

Rule: Federal law is to be followed over the state law if there is a conflict.

Student 3.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul
United States Supreme Court, 1963.
373 U.S. 132

FACTS: The Florida Lime and Avocado Growers were unable to sell their product due to a difference in strictness between California laws and federal laws.

Evaluation: Two (2) points as student does not clearly define the regulatory difference between the federal and state definitions. Use of word "strictness" is not appropriate to this case.

ISSUE: Is the product allowed to be sold under the federal law in California if the California law is stricter than the federal law?

HOLDING: No. The more stringent law typically supersedes the other. Since the two laws can co-exist and can be followed simultaneously, then there is no reason for the growers to not follow both sets of laws.

RULE: Congress holds no view on this matter. States have the authority to regulate "valid regulations designed for the protection of the consumer." Since the two laws can co-exist, there is no reason for the federal government to overthrow the state regulations on the maturity of the product.

Jones v. Rath Packing Co.
United States Court of Appeals for the Ninth Circuit, 1977.
430 U.S. 519

FACTS: Bacon and packaged flour were removed from sale due to lots whose average net weight was less than the net weight stated on the packages.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

ISSUE: Is the product considered misbranded if the package is labeled under California law instead of the federal law?

HOLDING: Yes. The more stringent law supersedes the other. A consumer would not be able to accurately compare a product based on California standards with a product based on federal standards because they would not contain identical amounts.

RULE: "A major purpose of the FPLA is to facilitate value comparisons among similar products." Since the California law and federal law take into account different standards and tare weights (dry or taking into account moisture) when weighing packages, it is nearly impossible for the packages to have identical amounts of product in them. Therefore, the federal law supersedes the state law. It is concluded that "with respect to Rath's packaged bacon, § 12211 and Art. 5 are preempted by federal law." It is also concluded that "with respect to the millers' flour, enforcement of § 12211, as implemented by Art. 5, would prevent 'the accomplishment and execution of the full purposes and objectives of Congress' in passing the FPLA."

Student 4.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul
373 U.S. 132 (1963)

- FACTS: California has a law that prohibits the transportation or sale in California of avocados which contain less than 8 percent of oil, by weight ... excluding the skin and seed. The avocados grown in Florida do not meet this standard, but they meet the standard set by the federal government.
- ISSUE: Does California need to change its regulations to comply with the federal regulations?
- HOLDING: No, California does not need to change its regulations.
- RULE: The regulations can coexist, the state regulation is not an obstacle to the accomplishment of the federal regulations.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

Jones v. Rath Packing Co.
430 U.S. 519 (1977)

- FACTS: Products packaged by Rath Packing Co. were ordered removed from sale because the packages' net weight was less than the net weight stated on the packages.
- ISSUE: Do the federal laws which govern respondents' packing operations preclude California from enforcing its own regulations?
- HOLDING: Yes, the state regulations are preempted by federal law.
- RULE: The state regulations would prevent the accomplishment and execution of the full purposes and objectives of Congress so the state law must yield to the federal.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

Student 5.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul

373 U.S. 132 (1963)

FACTS: The Florida Lime & Avocado Growers, Inc. were rejected in interstate commerce with California because, even though they met the federal regulations, they did not meet the standards for California.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

ISSUE: Do state regulations supercede federal regulations when there is no possible compliance with both?

HOLDING: No, but "...federal regulation of a field of commerce should not be deemed preemptive of state regulatory power in the absence of persuasive reasons..."

RULE: In this case, the state may reject federal regulatory authority based on the fact that §792 is not such an obstacle because it does not stand "...as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."

Jones v. Rath Packing Co.

430 U.S. 519 (1977)

FACTS: Petitioner Jones removed from sale bacon and flour packaged by respondents because "the packages were contained in lots whose average net weight was less than the net weight stated" on packaging.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

ISSUE: Did Petitioner Jones have the power to supercede federal laws to enforce those in California?

HOLDING: No, his judgements did not allow for deviations in weight allowed by federal law and therefore his judgements are preempted by federal law.

RULE: The federal weight labeling standard for flour is the same as that for meat. Rath's packaged bacon is within weight limits and § 12211 and Art. 5 are preempted by federal law. Also, under the FD&C act and FPLA §§1451-1461 weight limits are to be held to their labeled net weight at the time of sale with an account for reasonable variations in weight due to packaging and processing.

Student 6.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul
373 U.S. 132 (1963)

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

FACTS:

California law prohibits the sale of avocados less than 8% oil by weight, defining them as not mature enough for sale. Many Florida-grown avocados cannot be sold in California under this law because they are considered unripe in that state, even though federal law defines them as mature.

ISSUE: Does the Supremacy Clause allow federal law to supersede state legislation and permit the sale of Florida avocados in within the state of California?

HOLDING: No. The California statute does not make interstate commerce of avocados impossible, therefore the federal government is neither permitted nor required to intervene.

RULE: California retains the right to regulate its own commerce under Section 702 of the state's Agricultural Code.

Jones v. Rath Packing Co.
430 U.S. 519 (1977)

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

FACTS:

Products from two California food manufacturers were removed from commerce because their

stated product weights varied from actual product weight. California law does not allow for "reasonable variations" in the weight of packaged food, whereas federal law does.

ISSUE: Should federal law preempt state law and allow the sale of these items?

HOLDING: Yes. Moisture loss occurs in many packaged foods, causing slight variations in weight.

Enforcement of the California statute in this case would "prevent the accomplishment and execution of the full purposes and objectives of Congress" by unnecessarily prohibiting commerce.

RULE: Under the Supremacy Clause, Cal. Bus. & Prof. Code 12211 must yield to the Federal Meat Inspection Act, and the Fair Packaging and Labeling Act.

Student 7.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul
373 U.S. 132 (1963)

FACTS: The Florida avocados, which meet the requirement of to be mature under the federal regulations, were rejected for transportation or sale in California due to they do not meet the California requirement of 8 percent of oil.

ISSUES: Is the federal regulation deemed preemptive of California regulatory power in this case?

HOLDING: No. The U.S. Supreme Court held, *inter alia*, that the California statue (which gauged maturity of avocados by oil content, when applied against Florida avocados that were certified as mature under federal regulations) does not offend the supremacy clause of the federal Constitution.

RULE: Under the Supremacy Clause, the intent of Congress to preempt all state law in a particular area may be inferred where the scheme of federal regulation is sufficiently comprehensive that it is reasonable inference that Congress left no room for supplementary state regulation. However, when the federal law lacks regulation over a particular aspect of regulation, then the states may be free to write their own requirement, like the §792 of California Agricultural Code.

Jones v. Rath Packing Co.
430 U.S. 519 (1977)

FACTS: Petition Jones ordered a removal from sale bacon packaged by Rath Packing Co. and flour packaged by three flour millers according to § 12211 and Art. 5 from California regulations, which were sought to be preempted by federal law.

ISSUES: Should § 12211 and Art. 5 from California regulations be preempted by federal law?

HOLDING: Yes. The U.S. Supreme Court held that the California statue and regulation, which made no allowance for loss of weight resulting from moisture loss during the course of food distribution practices, was preempted by the Wholesome Meat Act, was applied to the meat processor. The Court also held enforcement of the California law against the millers would prevent the accomplishment and execution of the full purposes and objectives of Congress, and therefore, the state law was required to yield to the federal.

RULE: When a state law “stands as an obstacle to the accomplishment of the full purpose and objectives of Congress,” the federal law is supreme and invalidates the state law. The § 12211 and Art. 5 were conflict with the federal law (FMIA, FD&C Act and FPLA), thus, with respect to the Rath’s bacon and General Miller’s flour, the state law must yield to the federal.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the “Answer Key.”

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the “Answer Key.”

Student 8.

Homework Week 15. State Laws and Their Relationship to Federal Laws

FLORIDA AVOCADO GROWERS v. PAUL

United States District Court

373 U.S. 132 (1963)

- FACTS: It is illegal for any transport or sale of avocados in California that contain less than 8% oil in the avocado.
- ISSUES: Should the avocados from Florida be subject to the maturity laws in California even if they comply with the regulatory laws established by Florida?
- HOLDING: Yes. If a product is traveling into a different state they should comply with the laws established by that state.
- RULING: The courts ruled with California. They said that the California law didn't conflict with federal law and that it promoted higher quality competition.

Evaluation: Two (2) points as student confuses in case "Issue" that State of Florida established the oil regulation. Student did not present Court ruling properly and generalizes that "a product" should "comply with importing state laws.

Jones v. Rath Packing Co.

United States Supreme Court

430 U.S. 519 (1977)

- FACTS: California passed a law that is different than what the Federal government had already established.
- ISSUE: Can a state pass a law or regulations that conflicts with what the Federal government has already established?
- HOLDING: No. If the state regulation goes against what the Federal government has already passed it is void and does not apply.
- RULING: The Supreme Court ruled in favor of the packaging company.

Evaluation: One (1) point as student brief does not reflect accurately the Court opinion/ruling. No mention of the issue of weight differences in relation to the state and federal regulations, which brought this case to the Court.

Student 9.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul
373 U.S. 132 (1963)

FACTS: California's Agricultural Code section 792 gauges the maturity of avocado by oil content, which is different than federal marketing orders.

Evaluation: Three (3) points as student does not indicate that the issue is one of imported food from one state to another. This form of interstate commerce is an important issue to present because it brings to the forefront the determination of federal preemption.

ISSUE: Is the California state law conflicting and preempting federal law?

HOLDING: No. They are acting within the authority to which they are entitled. As the federal law had nothing to do with the oil content, both standards could be met without compromising one or the other.

RULE: Both laws can be observed, for that fact there is no reason to overrule California state law.

Jones v. Rath Packing Co.
430 U.S. 519 (1977)

FACTS: Packages of flour contained an average net weight that was less than the net weight on the packages.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

ISSUE: Is the labeling on the packages contrary to federal law?

HOLDING: No. As the law is applied, California law doesn't differ from federal law. This doesn't resolve the case as it still needs to be determined if state law "stands as an obstacle to the accomplishment and execution of the full purpose and objectives of Congress". They are seeking fair comparison between similar products, they are unable to achieve if the weight on packing remains a variable.

RULE: Millers are to ensure that the loss of moisture will not bring the weight under the stated weight. State law must yield to federal.

Student 10.

Homework Week 15. State Laws and Their Relationship to Federal Laws

***Florida Lime and Avocado Growers, Inc. v. Paul*
373 U.S. 132 (1963)**

- FACTS: Florida avocado growers claimed the California's agricultural code for gauging avocado maturity (at least 8% oil content) was unconstitutional in that it was different than the federal marketing orders.
- ISSUE: Was California's agricultural code for gauging avocado maturity unconstitutional?
- HOLDING: California's agricultural code is not unconstitutional.
- RULE: Supremacy Clause, Art. VI, which states that in order for a federal law to displace a state law the state law, must stand "as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." California's agricultural code was not found to do this.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

***Jones v. Rath Packing Co.*
430 U.S. 519 (1977)**

- FACTS: Packages of bacon and flour were found by a California inspector to be below the weight indicated on the packaging and were ordered to be removed from sale.
- ISSUE: Was the order by the California inspector unconstitutional in that California's standards of weights and measures do not account for loss of moisture when federal regulations do make such allowances?
- HOLDING: Yes, California's regulations are unfairly more stringent than federal regulations.
- RULE: Supremacy Clause, Art. VI, which states that federal law, may displace a state law if the state law "...stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

Student 11.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul

373 U.S. 132 (1963)

Evaluation: Three (3) points as student did not clearly/fully explain the "rule" used by the court to decide this landmark case.

FACT: Florida growers of avocados appealed to the court against California's Agricultural Code

§ 792 because it prohibits the importation of their avocados deeming them immature, although they meet federal regulations for maturity.

ISSUE: Does the federal law preempt the state law in this case and force the district of California to accept the produce from Florida?

HOLDING: No. The states have the right to uphold a higher standard of food quality or safety for their population.

RULE: The appeal is dismissed.

Jones v. Rath Packing Co.

430 U.S. 519 (1977)

Evaluation: Two (2) points as student did not clearly define the issue between the state and federal regulations. Student did not clearly explain the "rule" used by the Court to decide this case.

FACT: Bacon and flour are removed from sale in California due to state law regarding packaging practices. The net weights of the products are not sufficient to meet the labeling, and the move is appealed.

ISSUE: Does state law take precedence over the federal law in this case?

HOLDING: No. The state law is preempted in this case because it prevents Congress from reaching its purpose to the fullest extent as per U.S. Const., art. VI.

RULE: The appeals are granted.

Student 12.

Homework Week 15. State Laws and Their Relationship to Federal Laws

Florida Lime and Avocado Growers, Inc. v. Paul

FACTS: Avocados grown in Florida were rejected for sale in California due to the avocados not having a high enough oil by weight content. The regulations for harvesting avocados are different in the two states, California regulations being state and Florida regulations being federal; differences in regulation are also due to the difference in the origin of the avocados and their natural growth and composition.

Evaluation: Four (4) points as all key legal issues indicated in brief. This legal brief closely matches the model legal brief in the "Answer Key."

ISSUE: Should federal regulations override the state regulations that reject the sale of some Florida avocados in California?

HOLDING: No.

RULE: California has the right to regulate its market and allow only things into commerce that they deem as appropriate for the sake of their consumers. The regulations of California are not standing in the way of congress, therefore no federal action needs to be taken.

Jones v. Rath Packing Co.

FACTS: It was found that both flour and bacon being sold in California were found to weigh less than the weight stated on the packaging.

Evaluation: Three (3) points as student did not clearly/fully explain the "rule" used by the court to decide this landmark case.

ISSUE: As foods naturally lose weight during the distribution process, should the foods be held to California law stating there can be no difference in the stated vs actual weight or should the foods be held to the federal law which states there can be a small difference between the weights?

HOLDING: Federal laws supersede the state laws in both cases.

RULE: The Constitution

Student 1.

Examination Question.

Answer: I do not think that there should only be one set of laws/regulations that can be “national” in scope and that would not require cooperation or collaboration between the FDA and the fifty states. I think that the federal laws and regulations should be attenuated and give more authority to the states to regulate food facilities, rather than leaving the present system in place. The preemption of law as it pertains to the federal government essentially having “dibs” on certain subjects seems pointless. If a state would like to reiterate a law through their own state laws or would like to make a law stricter, within reason, no matter what the subject matter, the federal government should not prohibit that.

I think that if there is a direct conflict between state and federal law or if the state law stands in the way of the intention of federal laws or ruling that the federal law can still preempt the state law. If there is already considerable “harmony” between the federal regulations and those of the states, then preemption should not be an issue for the most part. I think to say preemption is good or bad as a whole is a broad statement. In general, I think it can be important to make sure that states are not challenging certain federal laws, however, I think that if states want to address the same issue that is addressed at the federal level that they should be able to.

Evaluation: Three (3) points as student argues for more states' regulatory authority without indicating possible problems (e.g., different standards or labelling requirements) that would interfere with interstate commerce. No discussion of current cooperation/collaboration between federal and state agencies. Student presents view that states should be able to make stricter laws/regulations than federal regulations but does not indicate a defense of why this approach would be beneficial to the food industry and consumers.

Student 2.

Examination Question.

Answer:

There is considerable harmony between many states and federal regulations but there will always be differences so long as there isn't a standardization in all aspects by states and federal laws and regulations. Considering trade across borders, a nationalization of all laws and

regulations would help all companies become more competitive with regards to international trade but we would lose some of the freedoms we now hold. With national laws in place instead of state laws or regulations, though they may be very similar, states would lose the freedoms they now possess that allow them to choose for themselves how they wish to regulate their food markets. We must give states the freedom to govern and not force them into a national all-encompassing program that would make them feel trapped even though many state programs already comply almost completely with the regulations set at the federal level. The best business practices are created in a free market between all fifty states as it brings different ideas and thoughts forth from one state that another may not have thought of and vice versa. By allowing state to govern themselves we are essentially promoting even better food practices than would be observed at a federal level because states have to comply with standards set from other states if they are to do trade and not solely their own. I do believe there still is a need for federal regulatory agencies as they ensure best business practices are being followed by all states. These agencies also help to govern and help settle disputes between states or issues within a state by acting as an intermediary or judge in certain circumstances. It would be a grave error on the part of our government to forego its right and responsibility to help govern the states and in turn its citizens from food related issues. The system, as it now exists with federal and state regulatory agencies working in unison, is the best option we have. This unity provides us with the most strict, clear cut, and safe practices. It allows states to create laws for themselves, giving them a sense of freedom, while providing security by means of federal aid in the event food safety ever becomes a concern or issue of debate within a state.

Evaluation: Four (4) points as student clearly and concisely present a position with appropriate defense of same. Student indicated several issues that are currently in place ("harmony") and some of the benefits to businesses and consumers ("better food practices") under the scenario of greater

Student 3.

Examination Question.

Answer: I believe that the current system should continue as it presently operates between the federal and state governments. I think this is the best situation because the federal government should not be given too much power. This country was founded on the idea of states that could govern themselves, and a federal government is just in place to regulate the states. By giving all of the authority to the federal government, the states lose their individuality, and the ability to make laws and regulations specific to their constituents. That being said, I still think it is important for the federal government to be able to preempt state governments. It is important that the federal government can still keep the state's regulations somewhat uniform because most manufacturers function in many different states, and it would be very difficult to make that work if each state had very different laws. I know in the current system it seems that the federal and state governments are stepping on each other's toes too often, but I believe that is better than giving either one of them all the power to set the regulations for the whole country.

Evaluation: Three (3) points as student did not clearly defend the position of "continu[ing] the current system" as being the best position. Student mistakes that the "federal government" keeps "state's' (sic)

Student 4.

Examination Question.

Answer:

I believe the current system should remain in place. I think it is important that there be an established standard for the country and this is a major factor in my arguing that the system should remain the same. Just as important I believe that in each state there exists many different consumer preferences and requirements. I think that the consumers and voters of each state should have the opportunity to decide regulation through lobbying for policy change if necessary.

The established standard for the nation allows for a smoother system of trade. With continuity between states it is much easier. Also, if states were completely left to themselves how would the justice system deal with all the variety and court cases that would arise due to the different policies? I envision chaos with states deciding everything.

I also see how important it is that states are able to modify policy as is needed. Each state has different culture and citizen preference. For example, I see people in Oregon having a much different view on genetically modified agricultural products than those in Texas. Texans do not necessarily see many of the needs of labeling and knowing where their food came from as many Oregonians may. Leaving flexibility open to the states allows them to decide what is best for their own products.

The current system allows a nice balance between federal and state powers. Therefore, when issues arise federal policy makes it simple to determine what is legal and what is not legal even when interstate trade is involved. Interstate trade will become much more difficult as each state steps has its own policies and there's no overriding federal policy to preempt that of the states.

Evaluation: Four (4) points as student answer position and defense are clearly and concisely presented. Student uses good examples to justify answer sections. All key points are indicated in the answer.

Student 5.

Examination Question.

Answer: I think that there should only be one set of laws and regulations in the United States. I believe that this would make it a lot simpler for crossing state borders because other states wouldn't have to worry about another states regulations if it was different than their own. By consolidating all these regulations and laws into a general or federal regulation everything would go smoother. If states want to have a higher standard than what the federal government expects then it is up to them.

Another reason that I think this would be a good idea would be that there would be less confusion on inspects which would lead to less contaminated foods getting to the market. If inspectors only have to worry about one set of regulations they are going to be less likely to forget different things that they have to look for.

Evaluation: Two (2) points as student confuses the answer position in first paragraph. Argues for one set of laws/regs but then presents position that states can pursue a "higher standard" than federal government [standard]. No mention of several other issues that can arise (e.g., protection of state-specific industry, such as citrus growers, etc.).

Student 6.

Examination Question.

Answer: First of all it is necessary to draw a line for preemption of a state law or regulation of federal law, we have seen that in the case that we read about the avocados grown in Florida being shipped to California. There will always be interstate disputes and the federal law will be needed to resolve them. I think that reducing us to simply one set of laws would be a big reduction to the variety and individuality of many products that we have across the nation. While it may facilitate interstate trade there are many niche food plants in states that may have special regulations in state that they have lobbied for. We have the example of the avocados in California, apparently Californians like their avocados of a certain quality above that of the federal standard. I think that the present system can continue to run as it is and allow states to regulate themselves until it comes to interstate trade when the federal government can step in to ensure uniform quality across the nation.

Evaluation: Three (3) points as student confuses preemption by federal law over state law (first sentence of answer). Student indicates in last sentence of answer that there is confusion regarding states "regulat[ing] themselves" and the need for the federal agencies to "step in" when an interstate trade issue arises. Students learned earlier in course (homework assignments) that virtually all food trade in U.S. is considered interstate commerce.

Student 7.

Examination Question.

Answer: I think that when there is a discord between state and federal laws/regulations, the issue that arises is that the state wants what they want when yet the federal regulations are going above and beyond that to look at what's better for all the states, not just one. I don't think that we need just one set of laws/regulations or that powers need to be changed. Someone who works day in and day out with these laws/regulations may say otherwise, but with how well the system works, I don't think we necessarily need to change anything. I think that the FDA teaming up with state agencies works very well. With how safe our food supply is, apparently what we have now is working well. If we were to reduce the authoritative power of federal laws, there would be quite a bit of slack that states would have to pick up which could be quite a burden. If we were to make it so there was only one set of laws/regulations I feel like more things would start slipping through the cracks. It would be too much of a burden on one regulatory agency. The way things are now is working well and there does seem to be a great deal of "harmony" between agencies and regulatory bodies.

Evaluation: Two (2) points as student does not present convincing argument nor defense of a position. Although student indicates that the current system is "working well," the answer does not provide evidence of this – e.g., current collaborative efforts, court cases that adjust for federal preemption, etc. No mention of studied court cases of this legal area to justify the answer position.

Student 8.

Examination Question.

Answer:

Even though there is considerable “harmony” between the federal regulations and those of the states, small difference still exists between the federal requirement and state law requirement.

Sometimes, these differences are small and do not create a burden on interstate commerce. For example, Michigan's temperature requirement for smoked fish is that they are held “at or below 38 degrees Fahrenheit,” which is colder than the federal requirement. But sometimes it is otherwise. Michigan law prevents Michigan firms from manufacturing yellow margarine for interstate commerce, but federal law permits artificial coloring. Therefore, the Michigan firms could manufacture yellow margarine for export, but not for selling in state.

In my opinion, I prefer to continue as it currently operates between the federal and state regulatory agencies. Food production is a complex thing, it involves a lot of things, like culture, environment and directly related to human living. Every state has its specialty and uniformity.

If we use federal law for all the cases, it may destroy local economic or ignore local people's will. Furthermore, sometimes federal law may lack regulation over a particular aspect of regulation, and the states may write their own requirements on this particular aspect. For example, a state law may require a “last date of sale” because the FD&C Act has no provision related to open date labeling.

If we use state laws for all the cases, the uniformity of the regulatory law may become the major issue for national and international food companies, like the example for Michigan yellow margarine. If we only follow Michigan state law, then no yellow margarine from other states could sell in Michigan, or no local firms could produce yellow margarine for export. Moreover, most of the commerce is interstate or has an interstate impact, the companies need to follow several states' law (if only using state law) which will be very difficult for these food companies.

If we continue as it currently operates, with increasing nationalization and internationalization, the federal law could help the food companies become more national and international, it can help the economy. The difference between the federal regulations and those of the states will always exist, it will become smaller and smaller due to the nationalization, but it needs time. Since some difference is still significant, we should respect the uniformity of the state law now.

Evaluation: (Student is not native-born English speaker.) Four (4) points as student presents and defends (with examples) the answer position. Student indicates clearly many of the points presented in the “answer key” to this question.