SME REPORT

Course Reviewed: FST 1100

Prepared By: Dr. Courtney Simons, Consultant

Completed: May 25, 2018

Submitted To: Lorain Community College

Consultant Credentials: Dr. Simons has a BS in Food Science, MEd in Education, and PhD in Cereal Science. Before academia, he worked in the allied food industry in the area of research, technology transfer, food regulation, and food safety consulting for 12 years. Dr. Simons has been teaching at Wright State University Lake Campus, Celina as an Assistant Professor in food science for the past 4 years. During that time, he developed three new food science programs and at least 18 new food science classes.

Review Method: Review of course was completed based on rubric developed by Consultant. The rubric was designed to include consideration for course content, course quality, course design and relevance to industry.

SUMMARY: In general this course appears incomplete. There is no syllabus, no course objectives, and limited summary assessments with no final exam. The formatting appears to be more fitting for an online or hybrid course since there is limited face-to-face interactive resources such as PowerPoints included. Most of the resources were online videos. While the videos are generally of high quality, they will not be engaging on their own without linking them to specific objectives and assessment activities.

MATERIALS SUBMITTED FOR WEEK 1

Table 1. Review rubric for syllabus. Reviewed on May 23, 2018

Criteria	0	S	U
1.11 Design format includes instructor name, contact information, office hours, delivery			Χ
format, credit hours, class time, and location			
1.12 Textbook or other reference to required reading are provided			Χ
1.13 Recommended text(s) is appropriate for this course			Χ
1.14 Course prerequisites if any, are stated			Χ
1.15 The syllabus has a student/learning-oriented tone			Χ
1.16 Course outcomes are provided			Χ
1.17 Breakdown of course topics by chronological order is included			Χ
1.18 A list of course assessment activities is provided			Χ
1.19 Assessment is linked to learning outcomes			Χ
1.20 Assessment methods are diverse			Χ
1.21 Grading criteria is provided			Χ
1.22 Brief outline of instructor teaching philosophy that guides instructor's teaching practice is included			Х

1.23 Information about pertinent academic policies, including academic integrity,		Χ
accommodating student disabilities, feedback and class attendance is provided		
Comments:		
There was no syllabus submitted for this course.		

Table 2. Review rubric for course objectives in the syllabus. Reviewed on May 23, 2018

O = Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
2.11 Each learning objective is distinct from the others			Х
2.12 Objectives utilize active verbs that can be measured			Χ
2.13 Objectives are presented in a manner that learners will clearly know what they will be competent to do by the end of the course			Х
2.14 Objectives demonstrate various levels of skills on the Bloom's Taxonomy of educational objectives			Х
2.15 Course objectives are relevant to employers in the food industry			х
2.16 Course objectives represent no less than the minimum level of knowledge and skills that students will need to have to provide entry-level leadership in the food industry			Х
Comments:			
There was no course objectives submitted for this course.			

Table 3. Review rubric for **PowerPoint presentation on "Chemistry Spoilage Mechanisms"**. Reviewed on May 23, 2018

Criteria	0	S	U
3.11 Students are informed on how this presentation links to the overall course objectives			Х
3.12 Students are informed on specific lesson objectives to be achieved by the end of this presentation			Х
3.13 PowerPoint contains accurate and high-quality content		Χ	
3.14 PowerPoint is designed to reduce cognitive overload, including limiting the use of text and using appropriate colors, fonts, images and graphical illustrations to support presentation			Х
3.15 PowerPoint presentation integrates other methods of delivery to engage students beyond lecture (this may include asking a relevant question to solicit feedback, pop quiz, team work or other class activity to increase engagement and learning)			Х
3.16 At the end of the PowerPoint, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
3.17 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry		Х	
Comments:	•		
3.11 Link to course objectives			

3.12 Add lesson objectives

3.13 The notes for slide two links food spoilage only to microorganisms. However, students should be also made aware that other mechanisms such as chemical changes, physical damage and enzymatic activity also leads to food spoilage

The lesson describes what happens during spoilage without going too much in depth into the chemistry of how it happens. I suggest changing the title since the term "mechanisms" suggest that you will delve into the biochemistry of how the changes occur. It's fine if you choose not to go into that detail since students may not have the required prerequisite knowledge in chemistry and biology. In that case I suggest changing the title of the lesson to "Food maturation and spoilage"

3.16 Link to assessment

Table 4. Review rubric for **supplementary video on "Researchers work to naturally delay ripening in fruits and vegetables".** Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
4.11 Students are informed on how this video links to the overall course objectives			Χ
4.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
4.13 Video presentation contains accurate and high-quality content		Χ	
4.14 The content is appropriate for the level of the learner	Χ		
4.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
4.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry		Х	

Comments:

4.11 Link to course objectives

4.12 Add lesson objectives

4.13 Interesting content but it was not clear on how the bacteria accomplishes delay in ripening of the peaches. This would have been more helpful to the students.

4.15 Link to assessment

Table 5. Review rubric for supplementary video on "Ethylene gas". Reviewed on May 23, 2018

Criteria	0	S	U
5.11 Students are informed on how this video links to the overall course objectives			Χ

5.12 Students are informed on specific lesson objectives to be achieved as a result of			Х
watching this video			
5.13 Video presentation contains accurate and high-quality content		Χ	
5.14 The content is appropriate for the level of the learner	Χ		
5.15 At the end of watching the video, students are directed to a specific assessment			Χ
e.g. quiz or other activity, to help them review and reinforce the information they have			
just learned			
5.16 This lesson is relevant to specific knowledge and skills students will need to be		Χ	
successful when they enter the food industry			

- **5.11** Link to course objectives
- **5.12** Add lesson objectives
- **5.13** Interesting hack but does not explain why ethylene causes damage to non-ethylene producing fruits and vegetables. This would be a valuable addition. I suggest discussing that with your students or sending them to research to find out why.
- **5.15** Link to assessment

Table 6. Review rubric for **supplementary reading on "The commercial storage of fruits, vegetables, and florist and nursery stocks".** Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
6.11 Students are informed on how this reading links to the overall course objectives			Х
6.12 Students are informed on the specific lesson objectives to be achieved as a result of reading this material			Х
6.13 Supplementary reading contains accurate and high-quality content		Χ	
6.14 The content is appropriate for the level of the learner			Х
6.15 Source of content is cited with an appropriate citation style or is a direct link	Х		
6.16 At the end of the reading, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
6.17 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry		Х	

Comments:

- **6.11** Link to course objectives
- **6.12** Add lesson objectives
- **6.14** This is good information, but it's a 792 page document. You will need to be specific on what exactly students need to review and know from the reading.
- **6.16** Link to assessment

Table 7. Review rubric for laboratory exercise on "Denaturing proteins". Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
7.11 Students are informed on how this lab links to the overall course objectives			Χ
7.12 Students are informed on specific lesson objectives to be achieved as a result of			Х
doing this lab			
7.13 A background/introduction to the lab is given that clearly articulates the food		Х	
science principles to be learned			
7.14 The lab materials and methods are presented in a clear manner, enabling students		Х	
to comprehend and follow procedures independently			
7.15 Appropriate assessment questions are given at the end of the lab to ensure that			Χ
learning objectives are met			
7.16 The lab can be completed within a reasonable time as set in the syllabus (2 hours)	Χ		
7.17 This lesson is relevant to specific knowledge and skills students will need to be			Χ
successful when they enter the food industry			

Comments:

- **7.13** The video animation associated with this lab can only be shown using windows explorer browser. It will be good to let students know this. The animation does not give any indication as to why fever is a good immune response as your introduction to the animation would suggest.
- **7.15** Only one question was asked and it was not directly relevant to what the objectives of the lab appeared to be, i.e. determination of denaturation time.
- **7.17** In this lab students are identifying the time it takes for the egg to denature using heat and mechanical force. The lab appears over-simplistic and may partly be impractical. For example, since egg will denature gradually, it may be difficult for students to identify the exact time that denaturation takes place. A potential approach is to heat the liquid egg while simultaneously measuring texture changes using a viscosity meter.

MATERIALS SUBMITTED FOR WEEK 2

Table 8. Review rubric for **PowerPoint presentation on "Harvesting and processing"**. Reviewed on May 23, 2018

Criteria	0	S	U
8.11 Students are informed on how this presentation links to the overall course			Χ
objectives			

8.12 Students are informed on specific lesson objectives to be achieved by the end of		Χ
this presentation		
8.13 PowerPoint contains accurate and high-quality content	Χ	
8.14 PowerPoint is designed to reduce cognitive overload, including limiting the use of		Χ
text and using appropriate colors, fonts, images and graphical illustrations to support		
presentation		
8.15 PowerPoint presentation integrates other methods of delivery to engage students		Χ
beyond lecture (this may include asking a relevant question to solicit feedback, pop		
quiz, team work or other class activity to increase engagement and learning)		
8.16 At the end of the PowerPoint, students are directed to a specific assessment e.g.		Χ
quiz or other activity, to help them review and reinforce the information they have just		
learned		
8.17 This lesson is relevant to specific knowledge and skills students will need to be	Χ	
successful when they enter the food industry		

- **8.11** Link to course objectives
- **8.12** Add lesson objectives
- **8.13** Slide number five may confuse students to think that cultivars and varieties are the same. Review your definition of cultivars to clearly differentiate it from varieties. Also, remove the term "race" from the definition since this term is never applied to plants
- **8.16** Link to assessment

Table 9. Review rubric for supplementary video on "Porterville Citrus". Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
9.11 Students are informed on how this video links to the overall course objectives			Χ
9.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
9.13 Video presentation contains accurate and high-quality content	Х		
9.14 The content is appropriate for the level of the learner	Х		
9.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
9.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry			Х

Comments:

- 9.11 Link to course objectives
- **9.12** Add lesson objectives

9.13 To make this video more engaging, students could be asked to list the different varieties or cultivars mentioned in the video. Additionally they could provide images along with the list, as well as a description of general characteristics of each type.

9.15 Link to assessment

Table 10. Review rubric for **supplementary video on "10 foods that originally looked totally different".** Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
10.11 Students are informed on how this video links to the overall course objectives			Χ
10.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
10.13 Video presentation contains accurate and high-quality content	Χ		
10.14 The content is appropriate for the level of the learner	Х		
10.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
10.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry		Х	
Comments: 10.11 Link to course objectives	•	•	

10.12 Add lesson objectives

10.15 Link to assessment

Table 11. Review rubric for supplementary reading on "Apple cultivars". Reviewed on May 23, 2018

Criteria	0	S	U
11.11 Students are informed on how this reading links to the overall course objectives			Х
11.12 Students are informed on the specific lesson objectives to be achieved as a result of reading this material			Х
11.13 Supplementary reading contains accurate and high-quality content	Х		
11.14 The content is appropriate for the level of the learner	Х		
11.15 Source of content is cited with an appropriate citation style or is a direct link	Χ		
11.16 At the end of the reading, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
11.17 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry		Х	
Comments:			
11.11 Link to course objectives			

11.12 Add lesson objectives	
11.16 Link to assessment	

Table 12. Review rubric for supplementary videos on "Types of peeling". Videos include "Flame peeled onions", "This machine peels oranges in the most perfect way", and "How it's made: Canned tomatoes". Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
12.11 Students are informed on how this video links to the overall course objectives			Χ
12.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
12.13 Video presentation contains accurate and high-quality content	Х		
12.14 The content is appropriate for the level of the learner	Х		
12.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
12.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		
Comments:			
12.11 Link to course objectives 12.12 Add lesson objectives			

Table 13. Review rubric for "The many ways to peel produce" assessment. Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
13.11 Students are informed on the course and/or lesson objectives to be measured in			Χ
this assessment			
13.12 The assessment is consistent with learning outcome(s) supplied, allowing			Χ
instructor to know if students have learned the intended lesson			
13.13 The assessment instructions are clear enough for students to know what they are			Χ
being asked to do and how they will be graded (includes total points to be earned and			
question rubric where appropriate)			

Comments:

13.11 Link to learning outcomes

12.15 Link to assessment

13.12 Link to learning outcomes.

13.13 Add rubric to include expectation on specific content to be included and how each will be measured

MATERIALS SUBMITTED FOR WEEK 3

Table 15. Review rubric for **PowerPoint presentation on "Food dehydration and concentration"**. Reviewed on May 23, 2018

O = Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
15.11 Students are informed on how this presentation links to the overall course			Χ
objectives			
15.12 Students are informed on specific lesson objectives to be achieved by the end of			Χ
this presentation			
15.13 PowerPoint contains accurate and high-quality content	Χ		
15.14 PowerPoint is designed to reduce cognitive overload, including limiting the use of			Χ
text and using appropriate colors, fonts, images and graphical illustrations to support			
presentation			
15.15 PowerPoint presentation integrates other methods of delivery to engage			Χ
students beyond lecture (this may include asking a relevant question to solicit feedback,			
pop quiz, team work or other class activity to increase engagement and learning)			
15.16 At the end of the PowerPoint, students are directed to a specific assessment e.g.			Χ
quiz or other activity, to help them review and reinforce the information they have just			
learned			
15.17 This lesson is relevant to specific knowledge and skills students will need to be	Χ		
successful when they enter the food industry			

Comments:

15.11 Link to course objectives

15.12 Add lesson objectives

15.13 Good selection of topics and organization of ideas

15.16 Link to assessment

Table 16. Review rubric for **supplementary videos on "Dehydrated Food".** Videos include **"Smoking salmon"**, **"How it's made: Raisins"**, **and "How it's made: Beef jerky"**, **and "Sweet as sugar"**. Reviewed on May 23, 2018

Criteria	0	S	U
16.11 Students are informed on how this video links to the overall course objectives			Χ
16.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
16.13 Video presentation contains accurate and high-quality content	Χ		
16.14 The content is appropriate for the level of the learner	Χ		
16.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			X
16.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		

16.11 Link to course objectives

16.12 Add lesson objectives

16.15 Link to assessment

Table 17. Review rubric for supplementary videos on "Dehydrated Food". Videos include "Food dehydration systems", "Factors influencing drying", and "Basics of material drying webinar". Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
17.11 Students are informed on how this video links to the overall course objectives			Χ
17.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
17.13 Video presentation contains accurate and high-quality content	Χ		
17.14 The content is appropriate for the level of the learner	Χ		
17.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
17.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		

Comments:

17.11 Link to course objectives

17.12 Add lesson objectives

17.15 Link to assessment

General Comment: These are excellent videos to provide students a thorough understanding of the science of drying. However, students may find the reading narration in the "factors affecting drying" video unengaging.

Table 18. Review rubric for "Produce possibilities report" assessment. Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
18.11 Students are informed on the course and/or lesson objectives to be measured in			Χ
this assessment			
18.12 The assessment is consistent with learning outcome(s) supplied, allowing			Χ
instructor to know if students have learned the intended lesson			
18.13 The assessment instructions are clear enough for students to know what they are			Χ
being asked to do and how they will be graded (includes total points to be earned and			
question rubric where appropriate)			

Comments:

- **18.11** Link to learning outcomes
- **18.12** It is not clear how this assessment fits under the topic of dehydration that is being covered this week. Linking the assessment to learning outcomes would help.
- **18.13** Add rubric to include expectation on specific content to be included and how each will be measured

MATERIALS SUBMITTED FOR WEEK 4

Table 19. Review rubric for **PowerPoint presentation on "Heat preservation"**. Reviewed on May 23, 2018

Criteria	0	S	U
19.11 Students are informed on how this presentation links to the overall course			Χ
objectives			
19.12 Students are informed on specific lesson objectives to be achieved by the end of			Χ
this presentation			
19.13 PowerPoint contains accurate and high-quality content		Χ	
19.14 PowerPoint is designed to reduce cognitive overload, including limiting the use of			Χ
text and using appropriate colors, fonts, images and graphical illustrations to support			
presentation			
19.15 PowerPoint presentation integrates other methods of delivery to engage			Χ
students beyond lecture (this may include asking a relevant question to solicit feedback,			
pop quiz, team work or other class activity to increase engagement and learning)			
19.16 At the end of the PowerPoint, students are directed to a specific assessment e.g.			Χ
quiz or other activity, to help them review and reinforce the information they have just			
learned			
19.17 This lesson is relevant to specific knowledge and skills students will need to be	Χ		
successful when they enter the food industry			
Comments:			

- **19.11** Link to course objectives
- **19.12** Add lesson objectives
- 19.16 Link to assessment

General Comments:

Add image source on slides 11, 12 and 17

Add data source to slide 13 and 21

On slide 14, show students how you arrived at the bacteria population given a specific D-value

Table 20. Review rubric for supplementary video on "Low acid canning". Reviewed on May 23, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
20.11 Students are informed on how this video links to the overall course objectives			Χ
20.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
watching this video			
20.13 Video presentation contains accurate and high-quality content	Х		
20.14 The content is appropriate for the level of the learner	Х		
20.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
20.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		
Comments:			
20.11 Link to course objectives			
20.12 Add lesson objectives			

20.15 Link to assessment

Table 21. Review rubric for **supplementary videos on "Heat processing". Videos include "Scout's honor", and "Crunch time".** Reviewed on May 23, 2018

Criteria	0	S	U
21.11 Students are informed on how this video links to the overall course objectives			Χ
21.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
21.13 Video presentation contains accurate and high-quality content	Х		
21.14 The content is appropriate for the level of the learner	Х		
21.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х

21.16 This lesson is relevant to specific knowledge and skills students will need to be	Χ	
successful when they enter the food industry		

21.11 Link to course objectives

21.12 Add lesson objectives

21.15 Link to assessment

General Comment: These are great videos but there is very little emphasis on the heating process which appears to be the purpose of including these resources. I suggest replacing them with videos that focus and elaborate more on the heating step. Processing involving blanching, pasteurization or commercial sterilization (canning) would be a better fit.

MATERIALS SUBMITTED FOR WEEK 5

Table 22. Review rubric for **supplementary reading on "Cold preservation and processing".** Articles include **"From ice house to refrigerator" and "Ice-cream and immigrants".** Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	C
22.11 Students are informed on how this reading links to the overall course objectives			Χ
22.12 Students are informed on the specific lesson objectives to be achieved as a result			Χ
of reading this material			
22.13 Supplementary reading contains accurate and high-quality content	Χ		
22.14 The content is appropriate for the level of the learner	Χ		
22.15 Source of content is cited with an appropriate citation style or is a direct link	Х		
22.16 At the end of the reading, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
22.17 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry			Х

Comments:

22.11 Link to course objectives

22.12 Add lesson objectives

22.16 Link to assessment

General Comment: A knowledge of the history of refrigeration and ice-cream is interesting but not particularly critical. This may be included as "optional reading".

Table 23. Review rubric for **supplementary video "How it's made: Frozen fruit".** Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
23.11 Students are informed on how this video links to the overall course objectives			Χ
21.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
watching this video			
23.13 Video presentation contains accurate and high-quality content	Х		
23.14 The content is appropriate for the level of the learner	Х		
23.15 At the end of watching the video, students are directed to a specific assessment			Χ
e.g. quiz or other activity, to help them review and reinforce the information they have			
just learned			
23.16 This lesson is relevant to specific knowledge and skills students will need to be	Х		
successful when they enter the food industry			
Comments:			
23.11 Link to course objectives			
23.12 Add lesson objectives			

Table 24. Review rubric for supplementary video on "Naturipe Farms". Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

23.15 Link to assessment

Criteria	0	S	U
24.11 Students are informed on how this video links to the overall course objectives			Χ
24.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
24.13 Video presentation contains accurate and high-quality content	Χ		
24.14 The content is appropriate for the level of the learner	Х		
24.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
24.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry		Х	

Comments:

24.11 Link to course objectives

24.12 Add lesson objectives

24.15 Link to assessment

General Comment: This video does not address fruit freezing and therefore is not relevant to the topic being covered this week. I suggest removing it.

Table 25. Review rubric for **supplementary video on "Ice-Cream"** (Episode 13 – Slow Your roll). Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
25.11 Students are informed on how this video links to the overall course objectives			Χ
25.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
25.13 Video presentation contains accurate and high-quality content	Х		
25.14 The content is appropriate for the level of the learner	Χ		
25.15 At the end of watching the video, students are directed to a specific assessment			Х
e.g. quiz or other activity, to help them review and reinforce the information they have just learned			
25.16 This lesson is relevant to specific knowledge and skills students will need to be	Χ		
successful when they enter the food industry			

Comments:

25.11 Link to course objectives

25.12 Add lesson objectives

25.15 Link to assessment

General Comment: Very entertaining. It grabs and keeps your attention while providing high quality information on the production of ice-cream. Students will love this video.

Table 26. Review rubric for **supplementary video on "Mechanical versus cryogenic freezing and chilling for food products" (Episode 13 – Slow Your roll). Reviewed on May 24, 2018**

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
26.11 Students are informed on how this video links to the overall course objectives			Χ
26.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
26.13 Video presentation contains accurate and high-quality content	Х		
26.14 The content is appropriate for the level of the learner	Х		
26.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
26.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		

Comments:

26.11 Link to course objectives

26.12 Add lesson objectives

26.15 Link	to assessme	ent
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MATERIALS SUBMITTED FOR WEEK 6

Table 27. Review rubric for **supplementary video on "Amazing egg breaking and processing machine"**. Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
27.11 Students are informed on how this video links to the overall course objectives			Χ
27.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
27.13 Video presentation contains accurate and high-quality content	Х		
27.14 The content is appropriate for the level of the learner	Х		
27.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
27.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		
Comments: 27.11 Link to course objectives 27.12 Add lesson objectives			

Table 28. Review rubric for **supplementary video on "The world's famous commercial fishing company"**. Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

27.15 Link to assessment

Criteria	0	S	U
28.11 Students are informed on how this video links to the overall course objectives			Χ
28.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
watching this video			
28.13 Video presentation contains accurate and high-quality content	Х		
28.14 The content is appropriate for the level of the learner	Х		
28.15 At the end of watching the video, students are directed to a specific assessment			Χ
e.g. quiz or other activity, to help them review and reinforce the information they have			
just learned			

28.16 This lesson is relevant to specific knowledge and skills students will need to be	Х	
successful when they enter the food industry		
Comments:		
28.11 Link to course objectives		
28.12 Add lesson objectives		
28.15 Link to assessment		

Table 29. Review rubric for **supplementary reading on "Oceana study reveals seafood fraud nationwide".** Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
29.11 Students are informed on how this reading links to the overall course objectives			Χ
29.12 Students are informed on the specific lesson objectives to be achieved as a result			Χ
of reading this material			
29.13 Supplementary reading contains accurate and high-quality content	Χ		
29.14 The content is appropriate for the level of the learner	Χ		
29.15 Source of content is cited with an appropriate citation style or is a direct link	Х		
29.16 At the end of the reading, students are directed to a specific assessment e.g. quiz			Χ
or other activity, to help them review and reinforce the information they have just			
learned			
29.17 This lesson is relevant to specific knowledge and skills students will need to be	Χ		
successful when they enter the food industry			
Comments:			
29.11 Link to course objectives			
29.12 Add lesson objectives			

MATERIALS SUBMITTED FOR WEEK 7

Table 30. Review rubric for **PowerPoint presentation on "Unit Operations- Mixing and Blending"**. Reviewed on May 23, 2018

O = Outstanding; S = Satisfactory, U = Unsatisfactory

29.16 Link to assessment

Criteria	0	S	U
30.11 Students are informed on how this presentation links to the overall course			Χ
objectives			
30.12 Students are informed on specific lesson objectives to be achieved by the end of			Χ
this presentation			
30.13 PowerPoint contains accurate and high-quality content		Χ	

30.14 PowerPoint is designed to reduce cognitive overload, including limiting the use of		Χ
text and using appropriate colors, fonts, images and graphical illustrations to support		
presentation		
30.15 PowerPoint presentation integrates other methods of delivery to engage		Χ
students beyond lecture (this may include asking a relevant question to solicit feedback,		
pop quiz, team work or other class activity to increase engagement and learning)		
30.16 At the end of the PowerPoint, students are directed to a specific assessment e.g.		Χ
quiz or other activity, to help them review and reinforce the information they have just		
learned		
30.17 This lesson is relevant to specific knowledge and skills students will need to be	Χ	
successful when they enter the food industry		

30.11 Link to course objectives

30.12 Add lesson objectives

30.13 I recommend including images to illustrate the different types of mixers and their applications. Integrating short video clips in the PowerPoint to illustrate the principles of operation of different mixers would also be beneficial to your students.

30.16 Link to assessment

Table 31. Review rubric for supplementary videos on "Different blender types". Videos include "Ribbon mixer", "Paddle/ribbon blender", "Paddle mixer", "Vertical blenders", Matcon blender", "How the Silverson inline mixer works", "Static mixer", "Dual shaft mixer", and "Double planetary mixers". Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
31.11 Students are informed on how this video links to the overall course objectives			Χ
31.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
31.13 Video presentation contains accurate and high-quality content	Х		
31.14 The content is appropriate for the level of the learner	Х		
31.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
31.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		

Comments:

31.11 Link to course objectives

31.12 Add lesson objectives

31.15 Link to assessment

General comment: These videos are great additions to the content. I would suggest integrating these in the PowerPoint lectures where you can go beyond just showing the equipment but also elaborating on their principles of operation and best application for each.

Table 32. Review rubric for supplementary videos on "Forming Food". Videos include "Food Factory USA – Holy Cannoli!" (Cheese balls), "Food factory – Warhol soup" (Razzle's), "Pasta", and "Food Factory – Hey Dum Dum". Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
32.11 Students are informed on how this video links to the overall course objectives			Χ
32.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
watching this video			
32.13 Video presentation contains accurate and high-quality content	Х		
32.14 The content is appropriate for the level of the learner	Χ		
32.15 At the end of watching the video, students are directed to a specific assessment			Χ
e.g. quiz or other activity, to help them review and reinforce the information they have			
just learned			
32.16 This lesson is relevant to specific knowledge and skills students will need to be	Х		
successful when they enter the food industry			

Comments:

32.11 Link to course objectives

32.12 Add lesson objectives

32.15 Link to assessment

General Comment: These videos cover entire processes rather than just the forming step. Therefore your students may potentially get distracted by the volume of other information and details. I suggest extracting clips from these videos that just cover the section on forming. You can use software such as SnagIt to do this. While the videos show *how* forming is done, they do not delve into the science behind the process. This would be a very valuable addition.

Table 33. Review rubric for laboratory exercise on "Emulsifiers". Reviewed on May 24, 2018

Criteria	0	S	U
33.11 Students are informed on how this lab links to the overall course objectives			Χ
33.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
doing this lab			

33.13 A background/introduction to the lab is given that clearly articulates the food		Χ	
science principles to be learned			
33.14 The lab materials and methods are presented in a clear manner, enabling		Χ	
students to comprehend and follow procedures independently			
33.15 Appropriate assessment questions are given at the end of the lab to ensure that			Χ
learning objectives are met			
33.16 The lab can be completed within a reasonable time as set in the syllabus (2 hours)	Х		
33.17 This lesson is relevant to specific knowledge and skills students will need to be		Χ	
successful when they enter the food industry			

33.14 It appears that the intent of the lab is to identify the additives that have emulsification property (egg, paprika, dry mustard and egg yolk) and their emulsion stability over time. Hence, it would be beneficial to also include popular commercial emulsifiers such as lecithin and various monoglyceride as additional treatments.

Using a benchtop homogenizer to simulate the homogenization process or a simple high speed blender is recommended instead of hand shaking.

I suggest measuring the separation after a specific predetermined time (e.g. 20 minutes). Don't wait for full separation since this may take several hours for some emulsions. After the rest period, for better differentiation and visualization of the emulsion phase of the mix, the use of centrifugation is recommended.

MATERIALS SUBMITTED FOR WEEK 8

No content submitted for week 8.

MATERIALS SUBMITTED FOR WEEK 9

Table 34. Review rubric for **supplementary videos on "Size Reduction: Grinding"**. Videos include "Wheat into flour", "Baked Bread: How flour is made", "Understanding different flours and when to **use them"**. Reviewed on May 24, 2018

Criteria	0	S	U
34.11 Students are informed on how this video links to the overall course objectives			Х
34.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
34.13 Video presentation contains accurate and high-quality content	Χ		
34.14 The content is appropriate for the level of the learner	Χ		
34.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х

34.16 This lesson is relevant to specific knowledge and skills students will need to be	Χ	
successful when they enter the food industry		

34.11 Link to course objectives

34.12 Add lesson objectives

34.15 Link to assessment

General Comment: The "Baked Bread: How flour is made" video is essentially a repeat of the same information that is in the "Wheat into flour". Therefore, it can be eliminated. The video on "Understanding different flours and when to use them" does not appear to meet what I think your objective is, which is to teach students about the science behind the size reduction process.

Table 35. Review rubric for laboratory exercise on "Gluten-free flours". Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	J
35.11 Students are informed on how this lab links to the overall course objectives			Χ
35.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
doing this lab			
35.13 A background/introduction to the lab is given that clearly articulates the food		Χ	
science principles to be learned			
35.14 The lab materials and methods are presented in a clear manner, enabling			Χ
students to comprehend and follow procedures independently			
35.15 Appropriate assessment questions are given at the end of the lab to ensure that			Χ
learning objectives are met			
35.16 The lab can be completed within a reasonable time as set in the syllabus (2 hours)			Χ
35.17 This lesson is relevant to specific knowledge and skills students will need to be		Χ	
successful when they enter the food industry			

General Comments:

It seems as if the focus of the lab is on making a gluten-free product. Instead the focus should be on the milling process and its principles, since that is the topic being covered this week.

In procedure step 2, you made reference to separate instructions for the mill operation. However, this was not provided for my review. Please include that information in the lms for students to review ahead of time.

In procedure step 3, you imply that students will be able to control the mill time. I do not think this is the case for the Retsch 200 which the students will be using. However you will be able to adjust and control the mill speed (rpm) if that is what you meant.

In procedure step 5 you are asking students to formulate the flour to have the same nutritional characteristics as the wheat flour. This is not easily done. How are they going to do this? You should provide additional instruction on this topic to ensure that students know what to do. You may need

to have to teach them about mass balance and how to combine ingredients of known nutritional composition in order to achieve target end-points such as a specific protein concentration.

In procedure step 6 you ask students to make dough without giving any specific procedure on how to do this. Please provide this additional information. You also said that students may do this in the lab or at home. I suggest doing the exercise in the lab so that students follow the same procedures and have access to the appropriate equipment.

In procedure step 7, you said texture will be checked without giving any information on how this will be done. Please add this information.

MATERIALS SUBMITTED FOR WEEK 10

Table 36. Review rubric for supplementary videos on "Yogurt". Videos include "The fermentation process in yogurt", and "Food Factory USA – A whole lotta dough (Yogurt Factory in Minster OH). Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
36.11 Students are informed on how this video links to the overall course objectives			Χ
36.12 Students are informed on specific lesson objectives to be achieved as a result of			Χ
watching this video			
36.13 Video presentation contains accurate and high-quality content	Х		
36.14 The content is appropriate for the level of the learner	Χ		
36.15 At the end of watching the video, students are directed to a specific assessment			Χ
e.g. quiz or other activity, to help them review and reinforce the information they have			
just learned			
36.16 This lesson is relevant to specific knowledge and skills students will need to be	Х		
successful when they enter the food industry			
Comments:			
36.11 Link to course objectives			
36.12 Add lesson objectives			

Table 37. Review rubric for **supplementary videos on Mayo clinic minute: Figuring out fermented foods".** Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

36.15 Link to assessment

Criteria	0	S	U
37.11 Students are informed on how this video links to the overall course objectives			Χ
37.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Χ
37.13 Video presentation contains accurate and high-quality content	Χ		_

37.14 The content is appropriate for the level of the learner	Х	
37.15 At the end of watching the video, students are directed to a specific assessment		Х
e.g. quiz or other activity, to help them review and reinforce the information they have		
just learned	ſ	
37.16 This lesson is relevant to specific knowledge and skills students will need to be	Х	
successful when they enter the food industry		
Comments:		
37.11 Link to course objectives		
37.12 Add lesson objectives		
37.15 Link to assessment		

MATERIALS SUBMITTED FOR WEEK 11

Table 38. Review rubric for **laboratory exercise on "Fat testing for milk – The Babcock method".** Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
38.11 Students are informed on how this lab links to the overall course objectives			Х
38.12 Students are informed on specific lesson objectives to be achieved as a result of			Х
doing this lab			
38.13 A background/introduction to the lab is given that clearly articulates the food		Χ	
science principles to be learned			
38.14 The lab materials and methods are presented in a clear manner, enabling	Х		
students to comprehend and follow procedures independently			
38.15 Appropriate assessment questions are given at the end of the lab to ensure that			Х
learning objectives are met			
38.16 The lab can be completed within a reasonable time as set in the syllabus (2 hours)			Х
38.17 This lesson is relevant to specific knowledge and skills students will need to be	Х		
successful when they enter the food industry			
Comments:		•	
38.5 Add appropriate questions to reflect what you want students to take away from the	less	on.	

MATERIALS SUBMITTED FOR WEEK 12

Table 39. Review rubric for **supplementary videos on "High Pressure Processing"**. Videos include **"What is high pressure processing?"**, **HPP high pressure processing for food products"** and **HPP packing process"**. Reviewed on May 24, 2018

Criteria	0	S	U
39.11 Students are informed on how this video links to the overall course objectives			Χ

39.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video		Х
39.13 Video presentation contains accurate and high-quality content	Х	
39.14 The content is appropriate for the level of the learner	Х	
39.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned		X
39.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х	
Comments:		
39.11 Link to course objectives		
39.12 Add lesson objectives		
39.15 Link to assessment		

MATERIALS SUBMITTED FOR WEEK 13

Table 40. Review rubric for **supplementary videos on "Aseptic Packaging"**. Videos include "**Filling machine EL4 for aseptic range, portion sized packages**" and **Super Factories – Tetra Pak"**. Reviewed on May 24, 2018

Criteria	0	S	U
40.11 Students are informed on how this video links to the overall course objectives			Χ
40.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Χ
40.13 Video presentation contains accurate and high-quality content	Х		
40.14 The content is appropriate for the level of the learner	Х		
40.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
40.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		
Comments:			
40.11 Link to course objectives			
40.12 Add lesson objectives			
40.15 Link to assessment			

Table 41. Review rubric for "Aseptic packaging versus canning" assessment. Reviewed on May 24, 2018

Outstanding; S = Satisfactory, U = Unsatisfactory

Criteria	0	S	U
41.11 Students are informed on the course and/or lesson objectives to be measured in			Χ
this assessment			
41.12 The assessment is consistent with learning outcome(s) supplied, allowing			Χ
instructor to know if students have learned the intended lesson			
41.13 The assessment instructions are clear enough for students to know what they are			Χ
being asked to do and how they will be graded (includes total points to be earned and			
question rubric where appropriate)			

Comments:

- **41.11** Link to learning outcomes
- **41.12** Link to learning outcomes.
- **41.13** Add rubric

General Comment: The question as to whether or not aseptic packaging could or couldn't replace canning may not be interesting enough to generate much different points of view worthy of a discussion. Is the intent to highlight the advantages of aseptic packaging over canning? In that case you could simply ask students that assessment question without using a discussion format.

MATERIALS SUBMITTED FOR WEEK 14

Only one video was submitted. It was the same video on "Egg Breaking Machine" previously reviewed in week 6.

MATERIALS SUBMITTED FOR WEEK 15

Table 42. Review rubric for **supplementary videos on "World food needs"**. Videos include **"The rise of vertical farming" and "Why vertical farming won't save the planet"**. Reviewed on May 25, 2018

Criteria	0	S	U
42.11 Students are informed on how this video links to the overall course objectives			Х
42.12 Students are informed on specific lesson objectives to be achieved as a result of watching this video			Х
42.13 Video presentation contains accurate and high-quality content	Х		
42.14 The content is appropriate for the level of the learner	Х		
42.15 At the end of watching the video, students are directed to a specific assessment e.g. quiz or other activity, to help them review and reinforce the information they have just learned			Х
42.16 This lesson is relevant to specific knowledge and skills students will need to be successful when they enter the food industry	Х		
Comments:	•		
42.11 Link to course objectives			

42.12 Add lesson objectives

42.15 Link to assessment

MATERIALS SUBMITTED FOR WEEK 16

No material submitted for this week.