

Major Assessment Report Template

Please download this document and provide a response to each question in the appropriate section. Send your assessment reports to Dr. Angel Sanchez (aansanchez@csufresno.edu) in the Office of Institutional Effectiveness and copy Dr. Melissa Jordine (mjordine@csufresno.edu). Please complete a separate report for each Bachelors and Master's program offered by the department.

2018 assessment report: Research Project, Paper & Oral Presentation (FSC 125: Food and Daily Microbiology) was used to assess students' knowledge of Food Science major.

1. What learning outcome(s) did you assess this year? List all program outcomes you assessed (if you assessed an outcome not listed on your department SOAP please indicate explain). Do not describe the measures or benchmarks in this section. Also please only describe major assessment activities in this report. The G.E. Committee will issue a separate call for G.E. assessment reports.

Students will be able to identify the conditions, including sanitation practices, under which the important pathogens and spoilage microorganisms are commonly inactivated, killed or made harmless in foods.

Goal 1: Students will be able to think critically in order to analyze information and will be able to communicate their knowledge and analysis effectively in written and oral forms.

SLO 2: Students will demonstrate proficiency in written communication.

SLO 3: Students will demonstrate proficiency in oral communication by giving presentations.

SLO 4: Students will collect and analyze data.

Goal 1FS: Students will demonstrate an understanding of certain Food Science principles and will be able to apply statistical analysis to analyze information.

SLO 1FS.1: Students will demonstrate an understanding of sensory analysis.

SLO 1FS.2: Students will use statistical analysis to analyze information.

2. What instruments (assignment) did you use to assess them? If the assignment (activity, survey, etc.) does not correspond to the activities indicated in the timeline on the SOAP, please indicate why. Please clearly indicate how the instrument (assignment) is able to measure the outcome. If after evaluating the assessment you concluded that the measure was not clearly aligned or did not adequately measure the outcome please discuss this in your report. Please include the benchmark or standard for student performance in your assessment report (if it is stated in your SOAP then this information can just be copied into the report).

Students will be required to plan and execute a study of an area of food microbiology. Their project could be making a product or testing an existing product. Students will have 10 to 15 minutes to orally present their paper in class, using PowerPoint. (Please see attached the complete assignment.)

This is a three-part assignment that assesses students understanding, technical and oral skills in different area of food microbiology by focusing on Group Experimental Design, Individual Research Paper, and Group Oral Presentation.

This assignment was worth a total of 200 points (175 points for writing and 25 points for oral presentation) which worth 20% of grade for the course and students were expected to achieve a grade of C or better in order to be deemed proficient for the outcome.

There were 22 students in the course, all of their assignments were reviewed and graded using a grading rubric Sheet for this assignment, and a copy of the grading sheet has been provided along with this report.

- 3. What did you discover from the data?** Discuss the student performance in relation to your standards or expectations. Be sure to clearly indicate how many students did (or did not) meet the standard for each outcome measured. Where possible, indicate the relative strengths and weaknesses in student performance on the outcome(s).

Of the twenty-two students who submitted the assignment, two of them earned an A on the assignment, 14 of them earned a B, 6 of them earned a C on the assignment. All of the students met the expected benchmark of a C or better on the assignment.

“The department upon reviewing the grading sheet and the outcome did note that not all narrow grading criteria (spelling, grammar or punctuation errors) aligned with the outcome from our SOAP.”

- 4. What changes did you make as a result of the data?** Describe how the information from the assessment activity was reviewed and what action was taken based on the analysis of the assessment data.

Since all 22 students were deemed proficient in the designated Student Learning Outcome, no major changes to the program will be made.

- 5. What assessment activities will you be conducting in the 2018-2019 AY?** List the outcomes and measures or assessment activities you will use to evaluate them. These activities should be the same as those indicated on your current SOAP timeline; if they are not please explain.

According to our timeline in the SOAP report we plan to assess Community Program Planning Project assignment in Nutrition major, NUTR 166S (Community Nutrition) using method A2. We will assess outcomes :1,2,3,4,5, 1D.1 and 1D.2

- 6. What progress have you made on items from your last program review action plan?** Please provide a brief description of progress made on each item listed in the action plan. If no progress has been made on an action item, simply state “no progress.”

No Progress.

Additional Guidelines: If you have not fully described the assignment then please attach a copy of the questions or assignment guidelines. If you are using a rubric and did not fully describe this rubric (or the criteria being used) than please attach a copy of the rubric. If you

administered a survey please attach a copy of the survey so that the Learning Assessment Team (LAT) can review the questions.

ASSIGNMENT

Research Project, Paper & Oral Presentation (200 points)

You will be required to plan and execute a study of an area of food microbiology. Your project could be making a product or testing an existing product. A list of past research projects is available on the Blackboard Website.

You will have 10 to 15 minutes to orally present your paper in class, using PowerPoint. Each member of the team will submit an original, individually written research report.

Group Experimental Design (15 points)

Your experimental design (15 points) is due **February 15th**. Dr. Dormedy will spend time with each team during lab to review and modify, if necessary, your plan of action. Look at the journal articles you reviewed and see how they are set up similarly. Your experimental design should include:

- Introduction: a description of your proposed study and why important (justification)
- Hypothesis
- Methods and Materials, including statistical analysis
- Number of treatment groups, sample size of each treatment group, number of replications of experiment
- Timeline for each part of the experiment, including location of work
Work may be completed in the Food Science Lab, the 105 kitchen, the Grad lab (with advanced clearance), the Dairy processing facility (with advanced clearance), the Meats Lab (with advanced clearance).

Individual Research Paper (160 points)

Your written paper should adhere to the Written Assignment Guidelines and should follow the following structure (again, look at those journal articles for headings, subheadings, graphs, tables, overall format):

Title Page

Abstract (10 points)

An abstract not exceeding 110 words; all acronyms and abbreviations defined; no references cited. State what was done, how it was done, major results, and conclusions

Introduction and Literature Review (40 points)

In two pages or less, provide a brief literature review, discussing pertinent work, cite key references, explain importance of the research, and state objectives of your work.

Methodology (30 points)

Provide sufficient detail so work can be repeated. Describe new methods in detail; accepted methods briefly with references. Use subheadings as needed for clarity (for example, use subheadings for each analysis included in your study)

Use of abbreviations and acronyms: at first use in the paper use the full term, followed by abbreviation or acronym in parentheses.

Statistical analysis: if variation within a treatment (coefficient of variation, the standard deviation divided by the mean) is small (less than 10%) and difference among treatment means is large (greater than 3 standard deviations), it is not necessary to conduct a statistical analysis. If the data do not meet these criteria, appropriate statistical analysis must be conducted and reported.

Results (20 points) & Discussion of Results (40 points)

Present and discuss results concisely using figures and tables as needed. Compare results to those previously reported, and clearly indicate what new information is contributed by the present study.

Conclusions (20 points)

State conclusions (not a summary) briefly.

References

List only those references cited in the text. Required format of references is described below.

Group Oral Presentation (25 points):

Quality of Presentation & Use of Technology (4 points), Organization (4 points), Speaking Skills (2 points), Content (15 points)

GRADING RUBRIC (2 pages)

Grading Criteria : Written Paper (175 points)	
<p>Title Page</p> <p>Abstract (10 points) An abstract not exceeding 110 words; all acronyms and abbreviations defined; no references cited. State what was done, how it was done, major results, and conclusions</p>	
<p>Literature Review/Introduction (40 points) In two pages or less, review pertinent work, cite key references, explain importance of the research, and state objectives of your work.</p>	
<p>Experimental Design (15 points) Your experimental design is due _____, during lab. If late, one point will be deducted per day from your total. Dr. Dormedy will spend time with you each individually during lab to review and modify, if necessary, your plan of action. Your experimental design should include: a brief description of your proposed study including a flowchart, a hypothesis, number of treatment groups, sample size of each treatment group, number of replications of experiment, timeline for each part of the experiment, including location of work, and list of needed supplies to complete work</p>	
<p>Methodology (30 points) Provide sufficient detail so work can be repeated. Describe new methods in detail; accepted methods briefly with references. Use subheadings as needed for clarity (for example, use subheadings for each analysis included in your study) Use of abbreviations and acronyms: at first use in the paper use the full term, followed by abbreviation or acronym in parentheses. Statistical analysis: if variation within a treatment (coefficient of variation, the standard deviation divided by the mean) is small (less than 10%) and difference among treatment means is large (greater than 3 standard deviations), it is not necessary to conduct a statistical analysis. If the data do not meet these criteria, appropriate statistical analysis must be conducted and reported.</p>	
<p>Reporting of Results (20 points)</p> <p>Discussion of Results (40 points) Present and discuss results concisely using figures and tables as needed. Compare results to those previously reported, and clearly indicate what new information is contributed by the present study.</p>	
<p>Conclusions (20 points) State conclusions (not a summary) briefly.</p>	
<p>References List only those references cited in the text. Required format of references is described in lab syllabus. Papers must follow the name-year reference format of the Journal of Food Science (based on the format of the Council of Science Editors), that is summarized in syllabus. The Information for Authors can be views on the IFT website www.ift.org</p>	
Grading Criteria Oral Presentation (25 points)	
Quality of Presentation & Use Of Technology (5 points)	
Organization (3 points)	
Content (15 points)	
Speaking Skills (2 point)	

Written Report Scoring Rubric

Scoring Level	Style and Format = ~25%	Mechanics = ~25%	Content & Organization = ~50%
Exemplary (~90% and above)	In addition to meeting the requirements for a “Accomplished”, the paper is consistent with the style manual throughout. Models the language and conventions used in related scholarly/professional literature. Would meet the guidelines for a publication in the related discipline.	In addition to meeting the requirements for a “Accomplished”, the paper is essentially error free in terms of mechanics. Writing flows smoothly from one idea to another. Transitions help establish a sound scholarly argument and aid the reader in following the writer’s logic.	In addition to meeting the requirements for a “Accomplished”, excel in the organization and presentation of ideas related to topic. Raises important issues or ideas that may not have been represented in the literature cited. Would serve as a good basis for further research on the topic.
Accomplished (~80%-89%)	While there may be minor errors, style manual conventions for style and format are used consistently throughout the paper. Demonstrates thoroughness and competence in documenting sources; the reader would have little difficulty referring back to cited sources. Style and format contribute to the comprehensibility of the paper. Models the discipline’s overall journalistic style.	While there may be minor errors, the paper follows normal conventions of spelling and grammar throughout. Errors do not interfere significantly with comprehensibility. Transitions and organizational structures such as subheadings are used which help reader move from one point to another.	Follows all requirements for the paper. Topic is timely and carefully focused. Clearly outlines the major points related to the topic; ideas are logically arranged to present a sound scholarly argument. Paper is interesting and holds the reader’s attention. Does a creditable job summarizing related literature.
Developing (~70%-79%)	While some style manual conventions are followed, others are not. Paper lacks consistency of style and/or format. It may be unclear which references are direct quotes and which are paraphrased. Based on the information provided, the reader would have some difficulty referring back to cited sources. Significant revisions would contribute to the comprehensibility of the paper.	Frequent errors in spelling, grammar (such as subject/verb agreements and tense), sentence structure and/or other writing conventions make reading difficult and interfere with comprehensibility. Writing does not flow smoothly from point to point; lacks appropriate transitions.	While the paper represents the major requirement, it is lacking in substantial ways. The content may be poorly focused or the scholarly argument weak or poorly conceived. Major ideas related to the content may be ignored or inadequately explored. Overall, the content and organization needs significant revision to represent a critical analysis of the topic.
Beginning (~69% and below)	Style manual conventions are not followed. Fails to demonstrate thoroughness and competence in documentation. Lack of appropriate style and format	Paper contains numerous errors in spelling, grammar, and/or sentence structure that make following the logic of the paper extremely difficult.	Analysis of existing scholarly/professional literature on the topic is inadequate. Content is poorly focused and lacks organization. The reader is left with

	make reading and comprehensibility problematic.		little information about, nor understanding of, the paper's topic.
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