Assessment of Food Science Graduate Student Learning Outcomes: **Final Thesis or Dissertation Defense**

Student’s name: Degree sought (circle one): MS or PhD Date of Defense:

Evaluator: Role (circle one): Advisor or Committee member

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|  | 1 - Poor | 2 - Fair | 3 –Good | 4 – Outstanding | Score |
| LO1. Students able to critically evaluate scientific literature and information relevant to food science. |  |
| Uses scientific literature to justify the research project | Relevant scientific literature is used inadequately, presented without analysis, and/or incorrectly interpreted. | Relevant scientific literature is presented with minimal analysis, and/or discussed omitting key details. | References analyzed and discussed appropriately; however the analysis lacks depth and/or mostly shows support for the path of the research. | References are discussed appropriately to clearly show support for the path of the research. |  |
| Comments: |
| LO2. Students able to design and conduct research projects. (a) |  |
| Experimental Design | Hypothesis is not necessarily stated or understood. The methods are incorrectly described and/or do not test the hypothesis. | Hypothesis is vague or not a focus of thesis/dissertation. The series of methods are correct, but do not fully test the hypothesis. The analysis of the data is not always correct which might lead to erroneous conclusions. | Hypothesis is clear, but not entirely testable. The series of methods fully and correctly test the hypothesis, but more efficient methods are available. The analysis may not be sophisticated or artificially limit the outcome. | Hypothesis is stated clearly and clearly testable. The series of methods fully and correctly test the hypothesis and minimize the amount of testing required.  |  |
| Conducting research | Methods were not used correctly, not well understood, and/or undertaken in a timely manner. | A portion of the methods were performed correctly, and in a reasonable time-frame. | Methods were correctly performed, however lacked deep understanding and/or efficiency. | Clear mastery and understanding of the methods used. Research methods were used correctly and efficiently |  |
| Comments: |
| LO3. Students able to effectively communicate research findings to professional audiences. (b) |  |
| Content | Little discussion of project findings; Displayed poor grasp of material; Conclusions not supported by findings/outcomes. | Major topics or concepts inaccurately described; Considerable relevant discussion missing; Conclusions/summary not entirely supported by findings/outcomes. | Discussion is sufficient and has few errors; Conclusions/summaries are based on findings/outcomes and appropriate; Some recommendations are included. | Discussion is superior, accurate, and engaging; Conclusions/summaries and recommendations are appropriate and clearly based on finding/outcomes. |  |
| Written communication | The tone is unprofessional and not appropriate for an academic paper. Errors in sentence structure are frequent enough to be a major distraction to the reader. Many words are used inappropriately, confusing the reader. | The writing is not engaging, and the tone is not consistently professional or appropriate for an academic paper. Some sentences are awkwardly constructed so that the reader is occasionally distracted. Word choice is merely adequate, and the range of words is limited. Some words are used inappropriately. | The writing is generally engaging and the tone is generally professional. Sentences are well-phrased and flow from sentence to sentence is generally smooth. Word choice is generally good.  | The writing is compelling. The tone is consistently professional and appropriate for an academic research paper. Sentences flow smoothly from one to another. Word choice is consistently precise and accurate. |  |
| Oral communication | Does not speak clearly or with enthusiasm. Difficult for the audience to understand. Does not have eye contact with the audience. | Sometimes has eye contact with the audience. Sometimes speaks clearly and with enthusiasm. Easy for the audience to understand portions of the presentation. | Most of the time has eye contact with the audience. Most of the time speaks clearly and with enthusiasm. Easy for the audience to understand. | Appears comfortable & confident; maintains good eye contact. Uses his/her voice to create interest & emphasize key points. Speaks very clearly. Very easy for the audience to understand. |  |
| Style  | Contains numerous grammatical errors, lacks a logical progression, and is absent of interpretable visual aids.  | Minimal grammatical errors are present. Follows a logical progression. Visual aids enhance the audience experience, but they lack creativity and/or interpretability. | Almost no grammatical errors are present. Visual aids are creative and easy to read; tools enhance the audience experience. | No grammatical errors are present. Visual aids are creative, easy to read, and enhance the audience experience. |  |
| Answers to questions | Demonstrates insufficient knowledge of the topic by answering questions without explanations and elaboration. | Demonstrates partial knowledge of the topic by answering most questions with partial elaboration. | Demonstrates knowledge of the topic by answering most questions satisfactorily and with adequate explanations and elaboration. | Demonstrates full knowledge of the topic by answering all questions satisfactorily with detailed explanations and logical elaboration. |  |
| Comments: |

(a). The weighed score of this LO is composed of 40% Experimental Design and 60% Conducting Research.

(b). The weighed score of this LO is composed of 40% Content, 20% Written communication, 20% Oral communication, 10% Style, and 10% Answers to questions.

Please submit the completed forms to the FDSC Director of Graduate Studies, Dr. Tong Wang, within 3 days of the defense, regardless of the outcome of defense.