

# FDSC Graduate Student Assessment Tool

Date: \_\_\_\_\_ Degree Program (check box):  MS  PhD

Student Name: \_\_\_\_\_ Graduate committee member name: \_\_\_\_\_

Upon the completion of the graduate program in food science or nutrition, students will:

### 1. Technical Knowledge

Demonstrate advanced knowledge and understanding in their area of emphasis.

Demonstrate some knowledge across food science and/or nutrition disciplines outside of their core specialty area, commensurate with coursework completed during the degree.

### 2. Research and Scientific Enquiry Skills

Demonstrate scientific enquiry, problem solving and critical thinking skills through their thesis or dissertation topic.

### 3. Communication Skills

Demonstrate competency in written communication through their thesis/dissertation.

Demonstrate competency in oral communication through their required seminars and oral defense.

**General Instructions: Assess the student level for each of the skills and record it by placing a mark in the cell best representing the student's skill level**

Skill	Novice	Intermediate	Advanced	Expert
<b>Technical Knowledge</b>	Knowledge is very narrow and in most cases inaccurate. When knowledge has been gained, it is based on unreliable sources. Understands current literature poorly.	Knowledge is narrow but in most cases accurate. Knowledge is mostly based on existing literature from reliable sources.	Knowledge is broad around the student area of expertise and is accurate. Knowledge is rooted in existing literature.	Knowledge is advanced in a variety of topics around the student's area of expertise. Knowledge is based on recent literature. Understands the existing literature well enough to be critical.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical knowledge outside of the core research area.	Knowledge in other core areas of food science and/or nutrition (other than specialty) is cursory. Knowledge is less than would be expected after the completion of graduate level classes in food science and/or nutrition.	Displays some knowledge in other core areas of food science and/or nutrition (other than specialty). Knowledge is limited to a few disciplines.	Display knowledge in most food science and/or nutrition core areas. Knowledge is broad and indicative of mastery of graduate level courses taken.	Displays advanced knowledge in all food science areas discussed during the defense. Knowledge is broader than that obtained through graduate level classes and indicates a significant amount of self learning.
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Technical knowledge is assessed during proposal or final defense. Questioning by all committee members will assist the rater in determining the student's depth of knowledge within and outside their specialty area.**

**General Instructions: Assess the student level for each of the skills and record it by placing a mark in the cell best representing the student's skill level**

Skill	Novice	Intermediate	Advanced	Expert
Research and Scientific Enquiry Skills	<p>Topic Selection</p> <p>The research topic is defined but is general and lacks justification. The research does not seem to make hypotheses and objectives are vague. It is unlikely for the research to have an impact of the field on study.</p>	<p>Intermediate</p> <p>The research topic and justification for the research need are defined. Hypotheses and objectives are stated but lack clarity. The research topic is not very novel and potential impact is limited.</p>	<p>Advanced</p> <p>The research topic and justification for the research need are defined. Hypotheses and objectives are for the most part clear. The topic may not be truly innovative but the research has the potential to make contributions to the literature.</p>	<p>Expert</p> <p>The research topic and justification for the need are well defined. Hypothesis and objectives are clear. The topic is innovative and the research has the potential to be impactful</p>
	<p>Design Process</p> <p>Research design demonstrates a poor understanding of the methodologies or theoretical framework. The methods selection do not address the objectives.</p>	<p>Intermediate</p> <p>Critical elements of the methodology or theoretical framework are missing, incorrectly developed or unfocused.</p>	<p>Advanced</p> <p>Critical Elements of the methodology or theoretical framework are appropriately developed, however, more subtle elements are ignored or unaccounted for.</p>	<p>Expert</p> <p>All elements of the methodology or theoretical framework are skillfully developed. Appropriate methodology or theoretical frameworks may be synthesized from across disciplines or sub disciplines.</p>
	<p>Quantitative Skills</p> <p>Displays poor quantitative skills. Does not use statistics or uses statistics incorrectly. Does not master the basics of experimental design. Lists results but they are unorganized</p>	<p>Intermediate</p> <p>Displays average quantitative skills. Uses statistics, mostly correctly, but does not necessary understand the basis for the tests performed. Has some knowledge of experimental design. Organizes results but the organization is not effective in revealing important findings.</p>	<p>Advanced</p> <p>Displays good knowledge of both experimental design and appropriate data analyses for the data at hand. Understands the basis for the tests performed. Organizes results to reveal important findings.</p>	<p>Expert</p> <p>Displays outstanding knowledge of both experimental design and statistical analysis techniques. Uses some more advanced techniques for data analysis and/or visualization which allows the reveal of insightful results.</p>
	<p>Conclusions</p> <p>States ambiguous, illogical or unsupportable conclusions from research findings.</p>	<p>Intermediate</p> <p>States general conclusions that because of their generality, also apply beyond the scope of the research findings.</p>	<p>Advanced</p> <p>States conclusions focused solely on the research findings. The conclusions arise specifically from and respond specifically to the research findings.</p>	<p>Expert</p> <p>States conclusions that are a logical extrapolation from the research findings</p>
	<p>Limitations and Implications</p> <p>Presents limitations and implications, but they are possibly irrelevant and unsupported by the research.</p>	<p>Intermediate</p> <p>Presents relevant and supported limitations and implications</p>	<p>Advanced</p> <p>Discusses relevant and supported limitations and implications.</p>	<p>Expert</p> <p>Insightfully discusses in detail relevant and supported limitations and implications.</p>

**Graduate committees use the thesis, the slide presentation for the oral defense to make a determination of the student research skills including quantitative skills, scientific enquiry, critical thinking and problem solving skills.**

**General Instructions: Assess the student level for each of the skills and record it by placing a mark in the cell best representing the student's skill level**

Skill		Novice	Intermediate	Advanced	Expert
<b>Oral Communication skills (Thesis/Dissertation presentation)</b>	Organization/flow	Organizational Pattern (introduction, objectives, methods, results, conclusion) is not observable within the presentation.	Organizational pattern is intermittently observable within the presentation.	Organizational pattern is clearly and consistently observable within the presentation.	Organizational pattern is clearly and consistently observable, is skillful and makes the content of the presentation cohesive.
	Language/delivery	Language choices are unclear and minimally support the effectiveness of the presentation. Language is not appropriate to the audience. Presenter is difficult to understand most of the time.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience. Presenter is difficult to understand some of the time. Presenter is not enthusiastic.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience. Presenter is not hard to understand and shows some level of enthusiasm.	Language choices are imaginative, memorable, and compelling and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience. The presenter is enthusiastic and professional.
	Clarity, legibility and visual designs	Visuals are not clear and not well organized. Fonts are too small or colors show poor contrast. Visuals are not pleasing. Color choices are poor. Many grammatical errors	Visuals are clear and for the most part well organized. Slide organization shows signs of inexperience (e.g. too much text). Overall, there are few illustrations. Some grammatical errors	Visuals are clear and well organized and for the most part aesthetically pleasing. Slides are indicative of an experienced presenter and contain almost no grammatical errors. Efficient use of pictures, graphs, tables and illustrations.	Visuals are pleasing and professionally organized. Contain appropriate number of graphs, figures, pictures and illustration. Virtually no grammatical errors.
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**The student's oral communication competencies will be assessed on multiple occasions during the graduate program.**

**General Instructions: Assess the student level for each of the skills and record it by placing a mark in the cell best representing the student's skill level**

Written Communication skills (Thesis/Dissertation )		Skill	Novice	Intermediate	Advanced	Expert
		Content Development	Uses appropriate content and relevant content to develop simple ideas in some parts of the work.	Uses appropriate and relevant content to develop and explore ideas through most of the work	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline .	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject and convey the writer's understanding.
Conventions	Attempts to use a consistent system for basic organization and presentation of the work.	Follows expectations appropriate to Food Science and/or Nutrition for basic organization, content and presentation.	Demonstrates consistent use of important conventions particular to food science and/or nutrition including basic organization, content presentation and stylistic choices.	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to the discipline including organization, content, presentation and stylistic choices.	<input type="checkbox"/>	<input type="checkbox"/>
Sources	Demonstrates an attempt to use sources to support ideas in writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and scientific writing.	Demonstrates consistent use of credible and relevant sources to support ideas developed in the thesis or dissertation.	Demonstrates skillful use of high-quality, credible, relevant sources to support ideas developed in the thesis or dissertation.	<input type="checkbox"/>	<input type="checkbox"/>
Syntax and Mechanics	Uses language that sometimes impedes meaning because of errors in usage.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses straightforward language that generally conveys meaning to readers. The language in the thesis or dissertation has few errors.	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	<input type="checkbox"/>	<input type="checkbox"/>

**The student's written thesis is used as the basis for assessing student's written communication skill. At the time of the thesis or dissertation submission to the graduate committee, committee members will be asked to fill out the rubric prior to the defense date.**