

Written Dissertation and Oral Defense (PhD) and re-examination of content knowledge

Student _____

Number of refereed journal articles accepted or in press by today _____

Date _____

Committee member _____

Student Learning Outcome		SCORE	SCALE
SLO 1 (biology)	Information correct and relevant		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Question fully answered		
	Terminology and citations		
	Interpretation of content		
	SLO 1 Biology SUM		
SLO 1 (entomology/nematology)	Information correct and relevant		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Question fully answered		
	Terminology and citations		
	Interpretation of content		
	SLO 1 Entomology/Nematology SUM		
SLO 1 (research area)	Information correct and relevant		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Question fully answered		
	Terminology and citations		
	Interpretation of content		
	SLO 1 Research area SUM		
Student Learning Outcome		SCORE	SCALE
SLO 2 Experimental design, research methodology and statistics	Statistical understanding		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Experimental design understanding		
	SLO 2 Experimental design and statistics SUM		

Student Learning Outcome		SCORE	SCALE
SLO 3 Oral presentation skills	Organization		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Language		
	Delivery		
	Supporting material		
	Central message		
	SLO 3 Oral presentation skills ¹ SUM		
SLO 3 Written skills ²	Context and purpose		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Content development		
	Conventions		
	Sources and evidence		
	Syntax and mechanics		
	SLO 3 Written skills² SUM		
Student Learning Outcome		SCORE	SCALE
SLO 5 Critical thinking and application of inquiry and analysis ³	Clear statement of research problem and motivation		4 = Exemplary 3 = Proficient 2 = Marginal 1 = Unacceptable
	Value of research demonstrated		
	Knowledge of literature		
	Well-defined hypotheses or objectives		
	Sound methods/tools		
	Data interpretation and analysis		
	Conclusions		
	Broader impact and limitations		
	Independent research and developed expertise		
	SLO 5 – PhD Critical thinking SUM		

These scores do not determine whether the student passes or fails the oral defense or the written thesis/dissertation. They are for the committee to consider when deciding on whether the student passes or not. All committee members should fill out a form and copies should be delivered to the Graduate Coordinator's office for deposit in the student's file.

Supervisory committee chair - please share the results of this evaluation with your student, either summarizing their strengths/weaknesses or showing the individual score sheets.

SLO 1 (knowledge of discipline)	= _____ (maximum 48, minimum 12)
SLO 2 (knowledge of statistical and research methodology)	= _____ (maximum 8, minimum 2)
SLO 3 (oral communication skills)	= _____ (maximum 20, minimum 5)
SLO 3 (written communication skills)	= _____ (maximum 20, minimum 5)
SLO 5 (critical thinking ability)	= _____ (maximum 36, minimum 9)

Additional comments (strengths/weaknesses):

¹ Taken from Written Communication VALUE Rubric – Association of American Colleges and Universities

² Taken from Oral Communication VALUE Rubric - Association of American Colleges and Universities

³ Modified from Inquiry and Analysis VALUE Rubric - Association of American Colleges and Universities

Student Learning Outcome		4 - Exemplary	3 - Proficient	2- Marginal	1 - Unacceptable
SLO 1 Identify insects, other arthropods and/or nematodes, and describe their relationship with the environment and humans (Max. points 48, min. 12)	General knowledge in biology	<input type="checkbox"/> All information presented is both accurate and relevant	<input type="checkbox"/> Nearly all information presented is accurate and relevant	<input type="checkbox"/> Many inaccuracies and some misinterpretation of content and largely irrelevant	<input type="checkbox"/> Inaccurate or misinterpreted content and almost entirely irrelevant
		<input type="checkbox"/> Question is answered fully	<input type="checkbox"/> Question is essentially answered	<input type="checkbox"/> Multiple aspects of question unanswered	<input type="checkbox"/> Question not answered
		<input type="checkbox"/> Proper use of terminology and citations	<input type="checkbox"/> Mostly proper use of terminology and citations	<input type="checkbox"/> Improper use of terminology and citations	<input type="checkbox"/> Misuse of terminology and citations
		<input type="checkbox"/> Insightful interpretation of the content	<input type="checkbox"/> Demonstrates clear understanding of the content without misinterpretation	<input type="checkbox"/> Misinterpretation of content	<input type="checkbox"/> Gross misinterpretation of content
	General knowledge in entomology or nematology	<input type="checkbox"/> All information presented is both accurate and relevant	<input type="checkbox"/> Nearly all information presented is accurate and relevant	<input type="checkbox"/> Many inaccuracies and some misinterpretation of content and largely irrelevant	<input type="checkbox"/> Inaccurate or misinterpreted content and almost entirely irrelevant
		<input type="checkbox"/> Question is answered fully	<input type="checkbox"/> Question is essentially answered	<input type="checkbox"/> Multiple aspects of question unanswered	<input type="checkbox"/> Question not answered
		<input type="checkbox"/> Proper use of terminology and citations	<input type="checkbox"/> Mostly proper use of terminology and citations	<input type="checkbox"/> Improper use of terminology and citations	<input type="checkbox"/> Misuse of terminology and citations
		<input type="checkbox"/> Insightful interpretation of the content	<input type="checkbox"/> Demonstrates clear understanding of the content without misinterpretation	<input type="checkbox"/> Misinterpretation of content	<input type="checkbox"/> Gross misinterpretation of content
	In-depth knowledge in area of	<input type="checkbox"/> All information presented is both accurate and relevant	<input type="checkbox"/> Nearly all information presented is accurate and relevant	<input type="checkbox"/> Many inaccuracies and some misinterpretation of content and largely irrelevant	<input type="checkbox"/> Inaccurate or misinterpreted content and almost entirely irrelevant
		<input type="checkbox"/> Question is answered fully	<input type="checkbox"/> Question is essentially answered	<input type="checkbox"/> Multiple aspects of question unanswered	<input type="checkbox"/> Question not answered

	research specialization	<input type="checkbox"/> Proper use of terminology and citations	<input type="checkbox"/> Mostly proper use of terminology and citations	<input type="checkbox"/> Improper use of terminology and citations	<input type="checkbox"/> Misuse of terminology and citations
		<input type="checkbox"/> Insightful interpretation of the content	<input type="checkbox"/> Demonstrates clear understanding of the content without misinterpretation	<input type="checkbox"/> Misinterpretation of content	<input type="checkbox"/> Gross misinterpretation of content
SLO 2 Discuss appropriate research methodology, including aspects of statistical design and analysis, in the execution of arthropod research (Max. points 8, min. 2)	General knowledge in statistics and experimental method	<input type="checkbox"/> Answers all statistical questions correctly, in detail and logically	<input type="checkbox"/> Answers all statistical questions in some detail	<input type="checkbox"/> Attempts all statistical questions but has errors in answers	<input type="checkbox"/> Does not attempt to answer all statistical questions and/or has many errors
		<input type="checkbox"/> Answers all experimental methodology questions correctly, in detail and logically	<input type="checkbox"/> Answers all experimental methodology questions in some detail	<input type="checkbox"/> Attempts all experimental methodology questions but has errors in answers	<input type="checkbox"/> Does not attempt to answer all experimental methodology questions and/or has many errors
SLO 3 Written skills ¹	Context and purpose	Demonstrates a thorough understanding of context, audience, and purpose that focuses all elements of the work.	Demonstrates adequate consideration of context, audience and purpose, and a clear focus of the work.	Demonstrates awareness of context, audience, and purpose of the work.	Does not demonstrate attention to context, audience, and purpose of the work.

Max. 20 points, min. 5 points	Content development	Consistently uses appropriate, relevant and compelling content to illustrate mastery of the subject, conveying the writer's understanding.	Consistently uses appropriate, relevant, and compelling content to explore ideas within the subject.	Use appropriate and relevant content to develop and explore ideas throughout most of the work.	Does not use appropriate and relevant content to develop simple ideas.
	Conventions	Detailed attention to and successful execution of all conventions specific to the discipline (organization, content, presentation, formatting, style)	Consistent use of important conventions specific to the discipline.	Follows expectations appropriate for specific discipline for organization, content and presentation.	Does not use a consistent system for basic organization and presentation.
	Sources and evidence	Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate.	Demonstrates consistent use of credible, relevant sources to support ideas.	Demonstrates an attempt to use credible and/or relevant sources to support ideas.	Does not use sources to support ideas.
	Syntax and mechanics	Uses language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers and has few errors.	Uses language that generally conveys meaning to readers with clarity but may include errors.	Uses language that sometimes impedes meaning because of errors in usage.
Student Learning Outcome		4 - Exemplary	3 - Proficient	2- Marginal	1 - Unacceptable
SLO 3 Oral presentation skills ²	Organization (specific introduction and conclusion, sequence of	Organizational pattern is clearly and consistently observable, is skillful, and makes the content of the presentation cohesive	Organizational pattern is clearly and consistently observable	Organizational pattern is intermittently observable	Organizational pattern is not observable

Max. 20 points, min. 5 points	material in body, and transitions)				
	Language	Language choices enhance the effectiveness of the presentation and are appropriate for the audience.	Language choices generally support the effectiveness of the presentation and are appropriate for the audience.	Language choices partially support the effectiveness of the presentation and are appropriate for the audience.	Language choices are unclear and minimally support the effectiveness of the presentation and are not appropriate for the audience.
	Delivery (posture, use of pointer, eye contact, vocal expressiveness)	Delivery techniques make the presentation compelling, and speaker appears polished and confident.	Delivery techniques make the presentation interesting and speaker appears comfortable.	Delivery techniques make the presentation understandable, and speaker appears tentative.	Delivery techniques detract from the understandability of the presentation and speaker appears uncomfortable.
	Supporting material (explanations, examples, illustrations, figures, photos, diagrams, statistics)	A variety of supporting materials makes appropriate reference to information or analysis that significantly supports the presentation.	Supporting materials make appropriate reference to information or analysis that generally supports the presentation.	Supporting materials make appropriate reference to information or analysis that partially supports the presentation.	Insufficient supporting materials make reference to information or analysis that minimally supports the presentation.
	Central message	Central message is compelling (strongly stated, appropriately repeated, memorable and strongly supported).	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated or is not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.
Student Learning Outcome		4 - Exemplary	3 - Proficient	2- Marginal	1 - Unacceptable
SLO 5 – PhD Critical thinking and application	Has stated the research problem clearly, providing motivation for	Clear statement of the research problem with well stated associated rationale	Statement of research problem with associated rationale	Unclear statement of research problem OR rationale for undertaking the research is not well developed	Unclear statement of research problem AND rationale for undertaking the research is not well developed

<p>of inquiry and analysis³</p> <p>Max. 36 points, min. 9 points</p>	undertaking the research				
	Demonstrated the potential value of solution to the research problem in advancing knowledge within the area of study	Clearly states the value of the proposed research	States the value of proposed research	Recognizes the value of the research but didn't state explicitly	Doesn't recognize the potential value of the proposed research
	Demonstrates sound knowledge of literature in the area, and of prior work on the specific research problem	Synthesizes in-depth information from relevant sources representing various points of view/approaches	Presents in-depth information from relevant sources presenting various points of view/approaches	Presents information from relevant sources representing limited points of view/approaches	Presents information from irrelevant sources representing limited points of view/approaches
	Research is creative and original with well-defined hypotheses or objectives	Highly creative and original with well-defined hypotheses or objectives	Somewhat creative and original with well-defined hypotheses or objectives	Research not very creative and original OR hypotheses or objectives not well-defined	Research neither creative nor original AND hypotheses or objectives not well-defined

	Has applied sound state-of-the field research methods/tools to solve the defined problem and has described the methods/tools effectively	All elements of the methodology are skillfully developed. Appropriate methodology may be synthesized from across disciplines or from relevant subdisciplines	Critical elements of the methodology are appropriately developed, however, more subtle elements are ignored or unaccounted for	Critical elements of the methodology are missing, incorrectly developed, or unfocused	Design of experiments demonstrates a misunderstanding of the methodology
	Analyzed and interpreted research results/data effectively	Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus	Organizes evidence to reveal important patterns, differences, or similarities related to focus	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities	Lists evidence, but it is not organized and/or is unrelated to focus
	Conclusions	Conclusions are logical extrapolations from the research findings	Conclusions focused solely on research findings.	Conclusions are so general that they apply beyond the scope of the research findings	Conclusions are ambiguous, illogical, or unsupportable from inquiry findings
	Demonstrated awareness of broader implications and limitations of the concluded research	Insightfully discusses in detail relevant and supported limitations and implications	Discusses relevant and supported limitations and implications	Presents relevant and supported limitations and implications	Presents limitations and implications but they are possibly irrelevant and unsupported
	Has demonstrated capability for	Research was conceived and conducted independently and candidate has	Research was conceived and conducted with minimal supervision.	Research topic and methodology was conceived with much supervision.	Research topic and methodology was provided to the student and candidate

	independent research in the area of study and expertise in the area, appropriate to the degree	demonstrated a high level of expertise in the area	Candidate is confident in the area of research	Candidate shows some competence in the area	shows little expertise in the area
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