Entomology and Nematology PhD Qualifying Exam – rev. 10/18

Student _____ Date _____ Committee member_____

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

		SCORE	SCALE
SLO 3 Written skills[2]	Content and organization		**4 = Exemplary** **3 = Proficient** **2 = Marginal** **1 = Unacceptable**
	Syntax and mechanics – fluid and clear		
	Syntax and mechanics – error free		
	SLO 3 Written skills[2] SUM		
Student Learning Outcome		**SCORE**	**SCALE**
SLO 5 Critical thinking and application of inquiry and analysis[3]	Judgment		**4 = Exemplary** **3 = Proficient** **2 = Marginal** **1 = Unacceptable**
	Analysis of material		
	Synthesis of content		
	Reflection and evaluation		
	Advanced thinking and conceptualization		
	Logical flow		
	SLO 5 – PhD Critical thinking SUM		

These scores do not determine whether the student passes or fails the PhD qualifying exam. You can use the scores in your decision but there is no cut-off score below which the student fails the exam. 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 12, minimum 3)
SLO 3 (written communication skills)   = _____ (maximum 12, minimum 3)
SLO 5 (critical thinking ability)   = _____ (maximum 24, minimum 6)

Additional comments

		Exemplary (4)	Proficient (3)	Marginal (2)	Unacceptable (1)
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	☐ All information presented is both accurate and relevant	☐ Nearly all information presented is accurate and relevant	☐ Many inaccuracies and some misinterpretation of content and largely irrelevant	☐ Inaccurate or misinterpreted content and almost entirely irrelevant
		☐ Question is answered fully	☐ Question is essentially answered	☐ Multiple aspects of question unanswered	☐ Question not answered
		☐ Proper use of terminology and citations	☐ Mostly proper use of terminology and citations	☐ Improper use of terminology and citations	☐ Misuse of terminology and citations
		☐ Insightful interpretation of the content	☐ Demonstrates clear understanding of the content without misinterpretation	☐ Misinterpretation of content	☐ Gross misinterpretation of content
	General knowledge in entomology or nematology	☐ All information presented is both accurate and relevant	☐ Nearly all information presented is accurate and relevant	☐ Many inaccuracies and some misinterpretation of content and largely irrelevant	☐ Inaccurate or misinterpreted content and almost entirely irrelevant
		☐ Question is answered fully	☐ Question is essentially answered	☐ Multiple aspects of question unanswered	☐ Question not answered
		☐ Proper use of terminology and citations	☐ Mostly proper use of terminology and citations	☐ Improper use of terminology and citations	☐ Misuse of terminology and citations
		☐ Insightful interpretation of the content	☐ Demonstrates clear understanding of the content without misinterpretation	☐ Misinterpretation of content	☐ Gross misinterpretation of content

	In-depth knowledge in area of research specialization	☐ All information presented is both accurate and relevant	☐ Nearly all information presented is accurate and relevant	☐ Many inaccuracies and some misinterpretation of content and largely irrelevant	☐ Inaccurate or misinterpreted content and almost entirely irrelevant
		☐ Question is answered fully	☐ Question is essentially answered	☐ Multiple aspects of question unanswered	☐ Question not answered
		☐ Proper use of terminology and citations	☐ Mostly proper use of terminology and citations	☐ Improper use of terminology and citations	☐ Misuse of terminology and citations
		☐ Insightful interpretation of the content	☐ Demonstrates clear understanding of the content without misinterpretation	☐ Misinterpretation of content	☐ 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	☐ Answers all statistical questions correctly, in detail and logically	☐ Answers all statistical questions in some detail	☐ Attempts all statistical questions but has errors in answers	☐ Does not attempt to answer all statistical questions and/or has many errors
		☐ Answers all experimental methodology questions correctly, in detail and logically	☐ Answers all experimental methodology questions in some detail	☐ Attempts all experimental methodology questions but has errors in answers	☐ Does not attempt to answer all experimental methodology questions and/or has many errors
SLO 3	Clarity	☐ Provides logically developed, thoughtful answers consistently	☐ Provides logical answers most of the time	☐ Answers may not be logical all the time	☐ Answers are confusing, illogical

		□ Language is eloquent	□ Language is straightforward	□ Language is awkward	□ Language is poor
Clearly and confidently communicate science in **oral** exam (Max. points 12, min. 3)	Confidence	□ Confident in verbal communication skills	□ Usually confident in verbal communication skills	□ Somewhat confident in verbal communication skills	□ Rarely confident in verbal communication skills
SLO 3 Clearly communicate science in **written** exam (*if written exam is given*) (Max. points 12, min. 3)	Content and organization	□ Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding of the questions	□ Uses appropriate, relevant, and compelling content to explore ideas within the context of the questions	□ Uses appropriate and relevant content to develop and explore ideas throughout most of the exam	□ Does not use appropriate and relevant content to develop simple ideas
	Syntax and mechanics	□ Uses language that skillfully communicates meaning to readers with clarity and fluency	□ Uses straightforward language that generally conveys meaning to readers	□ Uses language that generally conveys meaning to reader with clarity	□ Uses language that sometimes impedes meaning
		□ Writing is virtually error-free	□ Writing has few errors	□ Writing may include many errors	□ Writing has many errors
SLO 5 Critical thinking ability – ability to synthesize and extrapolate	Judgment	□ Valid judgments based on evidence	□ Nearly all judgments are valid and based on evidence	□ Judgments are occasionally invalid	□ Invalid judgments based on evidence provided
	Analysis of material	□ Analysis of material is insightful and conclusions are fully defensible	□ Analysis of material is accurate and conclusions are defensible	□ Analysis of material is inaccurate and conclusions are rarely defensible	□ Indefensible conclusions
	Synthesis of content	□ Synthesis of content is clearly evident	□ Content synthesized well for the most part	□ Merely recalls information, lists and defines but	□ No synthesis evident

(Max. points 24, min. 6)				rarely synthesizes content	
	Reflection and evaluation	☐ Response is deeply reflective and evaluative	☐ Response is reflective and evaluative	☐ Responses are rarely evaluative	☐ Response is not reflective or evaluative
	Advanced thinking and conceptualization	☐ Exhibits advanced thinking and conceptualization	☐ Exhibits clear thinking and conceptualization	☐ Little ability to detect patterns or conceptualize	☐ No advanced thinking or conceptualization
	Logical flow	☐ Logical flow of ideas	☐ Ideas tend to flow logically	☐ Flow of ideas is rarely logical	☐ Illogical flow of ideas