

## Entomology and Nematology M.S. Final Exam – rev. 10/18

Student \_\_\_\_\_ Date \_\_\_\_\_ Committee member \_\_\_\_\_

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

<b>SLO 3</b>  Written skills <sup>2</sup>	Content and organization		<b>4 = Exemplary</b> <b>3 = Proficient</b> <b>2 = Marginal</b> <b>1 = Unacceptable</b>
	Syntax and mechanics – clarity and fluidity		
	Syntax and mechanics – error free		
	<b>SLO 3 Written skills<sup>2</sup></b> <b>SUM</b>		
<b>Student Learning Outcome</b>		<b>SCORE</b>	<b>SCALE</b>
<b>SLO 4</b> Critical thinking and application of inquiry and analysis <sup>3</sup>	Judgment		<b>4 = Exemplary</b> <b>3 = Proficient</b> <b>2 = Marginal</b> <b>1 = Unacceptable</b>
	Analysis of material		
	Synthesis of content		
	Reflection and evaluation		
	Advanced thinking and conceptualization		
	Logical flow		
	<b>SLO 4 Critical thinking</b> <b>SUM</b>		

These scores do not determine whether the student passes or fails the M.S. final 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 4 (critical thinking ability) = \_\_\_\_\_ (maximum 24, minimum 6)

Additional comments

		<b>Exemplary (4)</b>	<b>Proficient (3)</b>	<b>Marginal (2)</b>	<b>Unacceptable (1)</b>
<b>SLO 1</b> 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 research specialization	<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
<b>SLO 2</b> 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
<b>SLO 3</b>	Clarity	<input type="checkbox"/> Provides logically developed, thoughtful answers consistently	<input type="checkbox"/> Provides logical answers most of the time	<input type="checkbox"/> Answers may not be logical all the time	<input type="checkbox"/> Answers are confusing, illogical

Clearly and confidently communicate science in <b>oral</b> exam  (Max. points 12, min. 3)		<input type="checkbox"/> Language is eloquent	<input type="checkbox"/> Language is straightforward	<input type="checkbox"/> Language is awkward	<input type="checkbox"/> Language is poor
	Confidence	<input type="checkbox"/> Confident in verbal communication skills	<input type="checkbox"/> Usually confident in verbal communication skills	<input type="checkbox"/> Somewhat confident in verbal communication skills	<input type="checkbox"/> Rarely confident in verbal communication skills
<b>SLO 3</b> Clearly communicate science in <b>written</b> exam ( <i>if written exam is given</i> )  (Max. points 12, min. 3)	Content and organization	<input type="checkbox"/> Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding of the questions	<input type="checkbox"/> Uses appropriate, relevant, and compelling content to explore ideas within the context of the questions	<input type="checkbox"/> Uses appropriate and relevant content to develop and explore ideas throughout most of the exam	<input type="checkbox"/> Does not use appropriate and relevant content to develop simple ideas
	Syntax and mechanics	<input type="checkbox"/> Uses language that skillfully communicates meaning to readers with clarity and fluency	<input type="checkbox"/> Uses straightforward language that generally conveys meaning to readers	<input type="checkbox"/> Uses language that generally conveys meaning to reader with clarity	<input type="checkbox"/> Uses language that sometimes impedes meaning
		<input type="checkbox"/> Writing is virtually error-free	<input type="checkbox"/> Writing has few errors	<input type="checkbox"/> Writing may include many errors	<input type="checkbox"/> Writing has many errors
<b>SLO 4</b> Critical thinking ability – ability to synthesize and extrapolate	Judgment	<input type="checkbox"/> Valid judgments based on evidence	<input type="checkbox"/> Nearly all judgments are valid and based on evidence	<input type="checkbox"/> Judgments are occasionally invalid	<input type="checkbox"/> Invalid judgments based on evidence provided
	Analysis of material	<input type="checkbox"/> Analysis of material is insightful and conclusions are fully defensible	<input type="checkbox"/> Analysis of material is accurate and conclusions are defensible	<input type="checkbox"/> Analysis of material is inaccurate and conclusions are rarely defensible	<input type="checkbox"/> Indefensible conclusions
	Synthesis of content	<input type="checkbox"/> Synthesis of content is clearly evident	<input type="checkbox"/> Content synthesized well for the most part	<input type="checkbox"/> Merely recalls information, lists and defines but	<input type="checkbox"/> No synthesis evident

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

#### SLO Achievement