**Entomology and Nematology PhD Qualifying Exam** – rev. 11/16

Student ­­­­­­­­­­­­\_\_\_\_\_Date \_\_\_\_\_\_\_ Committee member\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- |
| **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 1 | Clarity |  | **4 = Exemplary****3 = Proficient****2 = Marginal****1 = Unacceptable** |
| Confidence |  |
| **SLO 3 Oral presentation skills 1  SUM**  |  |
| **SLO 3**Written skills2 | Content and organization |  | **4 = Exemplary****3 = Proficient****2 = Marginal****1 = Unacceptable** |
| Syntax and mechanics |  |
| **SLO 3 Written skills2 SUM**  |  |
| **Student Learning Outcome** | **SCORE** | **SCALE** |
| **SLO 5** Critical thinking and application of inquiry and analysis3 | 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

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| --- | --- | --- | --- | --- |
|  | **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**Clearly and confidently communicate science in **oral** exam (Max. points 12, min. 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
 |
| 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(Max. points 24, min. 6) | 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 rarely synthesizes content
 | * No synthesis evident
 |
| 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
 |