## NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_

## Research Thesis and Defense

For completion of the degree of Master of Science in Bacteriology – Research Option, the student must write a formal thesis and defend it to their research committee at an oral exam. Guidelines on the format of the thesis and the oral examination can be found on the program website. The recommendation for award of the M.S. degree will be based on the strength of the thesis, the oral examination, and completion of coursework and all other Graduate School requirements.

Signatures indicate recommendation to award the M.S. in Bacteriology degree.

**Research Advisor** :

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (name) (department) (signature)

**Committee Members (at least two in addition to the Research Advisor are required):**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (name) (department) (signature)

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 (name) (department) (signature)

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 (name) (department) (signature)

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 (name) (department) (signature)

**After the student presentation and question period, the research committee will discuss student preformance and should provide:**

1. **an overall assessment of the Research Thesis and Defense (page 2)**

 **(based on the shaded criteria plus analysis and discussion)**

 **(2) feedback for the written Research Thesis (page 3)**

 **(3) feedback for the oral presentation of the Research Thesis (page 4)**

 **(4) their signature indicating acceptance of the Research Thesis and Defense (page 1)**

In determining the overall assessment and the written feedback, committee members should use the relevant rubrics as a guide but may include additional relevant feedback. The overall assessment for the Research Thesis and Defense (Pass with Distinction, Pass, or Fail) should be marked on the form. The candidate will be informed of the outcome of the proposal defense at its conclusion (after the committee has deliberated). If the overall assessment is “Fail”, the written comments should include if there are options for the student to remain in the program (e.g. re-write and/or re-defend the thesis, or other steps as appropriate). A copy of the completed forms should be sent to the Program Coordinator within 48 hours of the Committee’s determination of the outcome.

**Research Thesis Assessment**

|  |  |  |  |
| --- | --- | --- | --- |
| Criteria | Exceeds Expectations | Meets Expectations  | Does Not Meet Expectations  |
| Background Knowledge & Significance | * Fully explains background and information gap for project
* Articulates compelling study rationale
* Clarifies study significance in an exceptional manner
 | * Provides background for project
* Adequately articulates study rationale
* Clarifies study significance
 | * Fails to adequately provide background
* Fails to articulate study rationale well
* Does not articulate study significance
 |
| Study Design & Research | * Targets the identified gap(s) in the literature and explains them very well
* States hypothesis clearly
* Applies empirical knowledge to shape questions and explains them very well
* Articulates methods in detail and explains them very well
* •Research data clearly answers stated hypothesis
 | * Targets the identified gap(s) in the literature
* States hypothesis
* Applies empirical knowledge to shape questions
* Articulates methods
* Research data addresses stated hypothesis
 | * Fails to target the identified gap(s) in the literature
* Fails to state hypothesis
* Fails to apply theoretical frameworks to shape questions
* Fails to articulate methods
* Research data does not address hypothesis
 |
| Literature Review | * Exhibits superior knowledge of key concepts in subject area
* Exhibits excellent depth of knowledge in subject area
* Arguments are exceptionally coherent, clear, and organized to identify a gap in the literature
 | * Exhibits adequate knowledge of key concepts in subject area
* Exhibits depth of knowledge in subject area
* Arguments are coherent, clear, and organized to identify a gap in the literature
 | * Exhibits poor knowledge of key concepts in subject area
* Exhibits poor depth of knowledge in subject area
* Some arguments are not coherent, clear, or well organized to identify a gap in the literature
 |
| **OVERALL ASSESSMENT** |  **Pass with Distinction** |  **Pass** |  **Fail** |

**QUALITY OF WRITING (Check where appropriate; provide specific feedback below)**

|  |  |  |
| --- | --- | --- |
| * Writing is excellent
 | * Writing is adequate
 | * Writing is weak
 |
| * No grammatical or spelling errors apparent
 | * Some grammatical and spelling errors apparent
 | * Numerous grammatical and spelling errors apparent
 |
| * Organization is excellent
 | * Organization is adequate
 | * Organization is poor
 |
| * Documentation\* is excellent

**\***works cited/discussion of relevant research | * Documentation\* is adequate

**\***works cited/discussion of relevant research | * Documentation\* is poor

**\***works cited/discussion of relevant research |

**Feedback/Commentary regarding Research Thesis** (using Research Thesis rubrics [p. 2] as well as those in “Quality of Writing” feedback checklist above, and any additional relevant feedback not covered in the rubrics or checklist) *Use as much space as necessary*.

**QUALITY OF ORAL PRESENTATION (Check where appropriate; provide specific feedback below)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Criteria* | *Exceeds expectations* | *Meets**expectations* | *Does not meet expectations* |
| Overall Quality of Presentation |  |  |  |
| Appropriateness of Presentation Tools |  |  |  |
| Engagement with Audience  |  |  |  |
| Quality of Response to Questions |  |  |  |

**Feedback/Commentary regarding Oral Presentation** (using rubrics in “Quality of Oral Presentation” feedback checklist [above] plus any additional relevant feedback). *Use as much space as necessary*.