

Student: \_\_\_\_\_

Date: \_\_\_\_\_

Committee member: \_\_\_\_\_

## **Oral Candidacy Exam: Student Learning Outcome Assessment**

### **Biology – MS**

**Learning Outcome 1:** develop skills to conduct independent research as demonstrated by:

Holistic assessment will include assessment of:	1 = Exceeds Expectations	2 = Meets Expectations	3 = Below Expectations	4 = unacceptable
Ability to synthesize the peer-reviewed literature necessary to develop and justify the MS thesis research topic				
Ability to formulate testable hypotheses and design appropriate experimental protocols				
Ability to propose and justify appropriate statistical analyses				
Ability to formulate and justify expected results				
Ability to formulate conclusions and propose questions for future research relevant to the research topic				

**Learning Outcome 2:** demonstrate depth of knowledge about specific biological subdiscipline related to MS thesis research topic

	1 = Exceeds Expectations	2 = Meets Expectations	3 = Below Expectations	4 = unacceptable
Knowledge about specific subdiscipline related to MS thesis research topic				

**Learning Outcome 3:** demonstrate breadth of knowledge about general biological principals, as demonstrated through knowledge of:

	1 = Exceeds Expectations	2 = Meets Expectations	3 = Below Expectations	4 = unacceptable
cellular and molecular biology and genetics				
physiology				
ecology and environmental biology				
evolution				

**Learning Outcome 4:** develop presentation and communication skills, as demonstrated by the ability to present a PowerPoint presentation of the MS Thesis Research Topic that:

Holistic assessment will include assessment of:	1 = Exceeds Expectations	2 = Meets Expectations	3 = Below Expectations	4 = unacceptable
Provides sufficient background information to justify the proposed project.				
Clearly presents testable hypotheses				
Clearly presents the proposed experimental design and statistical analyses				
Clearly outlines the expected results and possible pitfalls to the proposed research				
Provides an overall clearly conceived and designed MS thesis project				