



Rubric for Assessing Student Learning Outcomes Biological Sciences – MS Thesis and Defense

Student Name:

Defense Date:

Advisor Name:

SLO 1: Knowledge of principles and theories in biology as demonstrated in the thesis defense:

Demonstrates adequate knowledge of general principles and theories in biology	
Demonstrates adequate knowledge of particular subdiscipline of study	

SLO 2: Application of scientific methods in biology as evidenced by the written thesis:

States the research problem clearly, providing motivation for undertaking the research	
Demonstrates sound knowledge of literature in the area, and of prior work on the specific research problem	
Shows a good understanding of how to use methods/tools effectively	
Defends use of particular methods/tools clearly and logically	

SLO 3: Effective oral communication of research in biology as evidenced by the thesis presentation:

Provides sufficient background information to justify the project	
Clearly presents the hypotheses tested	
Clearly presents the experimental design and statistical/analytical tools used	
Uses slides effectively to convey content	
Provides an overall clearly conceived and designed MS thesis	

SLO 4: Effective written communication of research in biology as evidenced by the written thesis:

States the research problem clearly, providing motivation for the research	
Synthesizes peer-reviewed literature appropriate for research topic	
Clearly describes appropriate scientific and statistical methods/tools	
Presents results clearly and succinctly	
Uses appropriate graphics	
Comes to conclusions that are supported by the results	