Biology Honors Thesis Rubric  
(Adapted from BioTAP, Reynolds, et al, 2009)

Criteria for honors  
To be considered for the award of honors, students must show proficiency in scientific research, as demonstrated by an original, independent, and substantive research question, as well as care in data collection and analysis. The student must also produce a written thesis that achieves the following:

• It is written for a broad audience of biologists, not just experts in the particular field of research.
• It makes a compelling argument for the significance of the student’s research within the context of current scientific literature.
• It explicitly interprets results in relation to a hypothesis.
• It discusses inconsistencies, uncertainties, or limitations of the results.
• It is coherent, reasonably free of errors, and professionally presented.

Student’s Name: _____________________________

Date: _____________________________

Is the thesis an appropriate length (20 – 40 pages, double spaced) YES  NO

Is the thesis format acceptable (scientific journal article or masters thesis) YES  NO

Higher-order Writing Issues

1. The writing is appropriate for the target audience (biology faculty in cell/mole, ID or Ecology and Evolution)

   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

2. The thesis makes a compelling argument for the significance of the student’s research within the context of the current literature.

   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

3. The thesis clearly articulates the student’s research goals.

   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

4a. [For theses with conclusive and complete results] The thesis skillfully interpret the
results.

4b. [For theses with inconclusive or incomplete results] The thesis provides an insightful explanation of the reasons underlying the lack of clear results.

5a. [For theses with conclusive and complete results] There is a compelling discussion of the implications of findings.

5b. [For theses with inconclusive or incomplete results] The thesis provides a thoughtful and thorough discussion of possible future studies or alternative approaches.

Mid- and Lower-order Writing Issues
6. The thesis is clearly organized

7. The thesis is free of writing errors.

8. The citations are presented consistently and professionally throughout the text and in the list of works cited.

9. The tables and figures are clear, effective, and informative.
Quality of Scientific Work
10. The thesis represents significant scientific research.
   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

11. The literature review is accurate and complete
   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

12. The methods are appropriate, given the student’s research question
   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

13. The data analysis is appropriate, accurate, and unbiased
   Strongly agree  agree  slightly agree  slightly disagree  disagree  strongly disagree

Strengths:

Weaknesses:

Grade if you want to report one now (S/U): __________