Thesis Guidelines for the Laboratory Research or Literature Review Pathways to the Honors degree in MCB

Guidelines for Preparing an Honors Thesis in MCB

Register for MCB 4997W, Honors Research Thesis, the semester you plan to complete your thesis (usually your final semester).

Your thesis may reflect 1) your laboratory research, or 2) your thesis may be based on literature research with the consent of your thesis advisor and your honor's advisor. In the first case, your thesis should take the form of a master's thesis or a scientific journal research paper. In the latter case, it should take the form of a review article. Your thesis must be a minimum of 15 pages, double spaced, exclusive of tables, figures, and references. Detailed guidelines are given below. These guidelines may also be used for undergraduates writing a senior thesis outside of the Honors Program.

I. PROCEDURES

Note: the deadlines vary annually. Specific deadlines for each year are published in the January/February Honors Newsletter or can be obtained from the Honors office, ROWE 419.

The deadline dates required by your thesis advisor and your MCB honors advisor to read and evaluate your thesis will be earlier than that set by the Honors Program. At least one draft of the thesis must be given to your thesis advisor and revised prior to final submission. It is your responsibility to establish due dates acceptable to your thesis advisor and to your honors advisor.

A. An abstract of your thesis must be submitted to the Honors Office (ROWE 419) by the specified deadline. In the spring semester, the deadline usually falls in the second or third week of February.

B. You are required to submit a draft of your thesis to your thesis advisor and your Honors advisor by the deadlines established by these advisors.

C. You are required to submit the final version of your thesis to the Honors office by the deadline set by the Honors Program.

II. THESIS GUIDELINES

A. Format

Your thesis must follow the format given below. For examples, you can examine copies of the Honors theses of all previous students from the biology departments in the Honors office in ROWE or visit the <u>Digital Commons</u>.

1. **Approval or title page** – The approval page should include the title of your thesis, your full name, signature lines for your thesis advisor, your Honors advisor, and any other thesis advisors as appropriate, the biology department in which your thesis was conducted, and the date.

- 2. Abstract. The abstract should be about 250 words on a separate page.
- 3. Acknowledgments. (optional)
- 4. Table of contents. (optional)
- 5. List of Tables. (optional)
- 6. List of Figures. (optional)
- 7. Introduction.

FOR RESEARCH THESES INCLUDE SECTIONS 8 – 10 BELOW.

FOR LITERATURE REVIEWS, substitute SECTIONS 8 – 10 with appropriate topics in consultation with your thesis advisor. This should include some synthesis of ideas to generate the "creative product" required for an honor's thesis. This could be "prospective for future work in the field" or "unanswered big questions in the field", etc.

8. Materials and Methods.

- 9. Results. This section may encompass several chapters.
- 10. Discussion.

11. **Literature Cited**. The format of the citations should follow that used in a scientific journal in your field. A typical format is shown below:

Huang, J. et al. 2004. Lsh, an epigenetic guardian of repetitive elements. *Nucleic Acids Research* 32(17):5019-5028.

B. Paper quality

Use 8.5 x 11 inch white bond paper. Onionskin and correctable paper are not acceptable. Your thesis should have no borders, running headers or punched holes.

C. Spacing, margins, & page numbering

All parts of the thesis with text should be doubled spaced. The margins should be 1.5 inches on the left and at least 1 inch on the top, bottom, and right sides. Pages should be numbered consecutively beginning with the approval page.

D. Printing

Use a clear font no smaller than 10 point and no larger than 12 point. Use black ink.

E. Figures

Electronic images embedded into the final document are preferred.