Honors Thesis in Behavioral Biology

The honors thesis in Behavioral Biology must be written by the student and include independent research carried out by the student through behavioral biology research or internship credits (AS.290.5xx). The length should be a minimum of eight pages single spaced (12 point font), plus figures and literature cited. Formatting can follow that of full research papers in either **Animal Behavior** or the **Journal of Neuroscience**. Below are brief descriptions of each of the sections that need to be included. Your paper must be approved by both your immediate supervisor/mentor (often a postdoctoral fellow or graduate student) and the lab PI (sometimes the same as the supervisor). You must submit an abstract of your thesis with your honors package by February 18th for spring conferral. The deadline to submit your thesis to your immediate supervisor is April 1st for Spring conferral. They should provide you with comments and then you will need to revise and submit it to your PI. **The DUS (Dr. Bohn) must be cc'd on all of the aforementioned emails.** Specific dates will be sent to graduating seniors in February of each year. For Fall conferral specific dates will be provided in September of each year.

Abstract (250 words max)
This should review each section of the manuscript. Include five keywords below your abstract on the first page.

Introduction (2 – 4 pages)
This provides the necessary background for understanding the paper. Remember your thesis will be reviewed by our program committee who may not specialize in your specific research. The best rule to follow is that the reader is a graduate in Behavioral Biology but does not work in the same lab. Include in this section what is known and what you will answer with your research including one or more hypotheses and specific predictions for your project. This section will have a lot of citations (see below) but no quotations.

Methods (2 – 3 pages)
Describe everything you did and all of the equipment you used. Be sure to include if there were components of the project or data that were collected by others. Write the methods section in past tense using an active voice (often first person). Figures are often helpful here to explain experimental set ups. (See section on Figures)

Results (1 – 2 pages + figures)
The results should be presented succinctly with a **minimum** of one statistical test or analyses that meet discipline standards, and **two figures**. Results have already occurred so they are written in past tense.

Discussion (3 – 4 pages)

Review the major findings of your study. How does it fit with what was expected or already known? Were there any limitations to the project? Are there future directions or alternative hypotheses that should be explored?

Literature Cited

A minimum of 15 citations are required. These should be from the primary literature (e.g., journal articles, book chapters) and follow the standard format of the journals listed above. Include last names of authors (or et al. if greater than two authors) and year for citations in text *ie* (Bohn et al. 2018). All references should be cited in the text. References are alphabetized in the Literature Cited section and are of the general format:

Figures (2 minimum)

Figures can be embedded in the text or placed together at the end of the paper. Figures should not have titles but *must have figure captions*. Captions should be written in such a way as to enable the reader to understand the figure. They should include a description of what is depicted in the figure and the implications it has for the findings of the paper. Figures must use 12-point font (including axis labels) and be of sufficient quality to be seen clearly without magnification.

Here are some links to get more information and tips for writing a scientific paper:

https://spie.org/news/photonics-focus/janfeb-2020/how-to-write-a-scientific-paper?SSO=1

https://esajournals.onlinelibrary.wiley.com/doi/full/10.1002/bes2.1258

https://www.nature.com/articles/d41586-018-02404-4