Thesis/Dissertation Guidelines within the Graduate Group in Horticulture and Agronomy

*General* expectations or goals for MS theses and PhD dissertations in the GGHA are:

1. MS thesis: description of a research problem and a report of procedures, results and conclusions of one or more significant scientific experiments directed toward that problem that are deemed appropriate for publication in a scientific journal.

2. PhD dissertation: description of a broad research problem and report of procedures, results and conclusions of a series of significant scientific experiments directed toward the problem. The results should form the basis for at least three chapters that are deemed appropriate for publication in scientific journals.

In the GGHA a format where chapters of the dissertation or thesis take the form of individual publishable papers is highly encouraged. These are tied together with a general introduction chapter and a general summary linking the findings. Co-authored manuscripts and ones in which the student is not first author are accepted by Graduate Studies. It is the GGHA’s preference that students’ dissertations be made up of first author manuscripts, however, your dissertation committee has final approval on the form and content of your dissertation.

A typical thesis/dissertation would follow the outline below:

I. Title Page

How to Structure your Title Page, see sample at [https://grad.ucdavis.edu/sites/default/files/upload/files/current-students/sample-title.pdf](https://grad.ucdavis.edu/sites/default/files/upload/files/current-students/sample-title.pdf). The spacing, language, and capitalization on your title page should match the sample/template exactly. You may change the font, text size, and position of the page number in the template to match those used in the rest of your paper.

II. Acknowledgments

III. Abstract

IV. Introduction

Literature review. Extent to be determined at the discretion of the Thesis/Dissertation Committee. Normally, the intact papers will review the relevant literature in their introductions and discussions. This section can be used to provide a more thorough review of the literature than is acceptable in the intended journals.

The last paragraph of the introduction should guide the reader through the material to be presented; it should make the reader aware of the overarching hypotheses and the overall logic, organization, and goals of the chapter(s) to follow, whether that is a single paper or a series of papers.
V. Chapters as Papers

Set of paper(s). The papers should be ready to submit, already submitted, or reprints. Your dissertation committee will determine if a draft paper that has not yet been submitted can be used as one of your chapters.

VI. Summary

The summary should synthesize the dissertation chapters. This section should not cut and paste summaries from individual chapters, although it can include a summary paragraph about individual chapters. The focus of the summary should be an over-arching synthesis of the entirety of the dissertation. The summary should address the general hypotheses/goals outlined in the Introduction.

VII. Bibliography

This section is optional as a separate Bibliography; alternatively, a “Literature Cited” section can be included with the separate papers in the usual way.

From the GGHA mentoring expectations:

The major professor is responsible for guiding students through thesis or dissertation research.

This means:

- Ensuring that the research is experimentally and statistically sound and supported by a thorough analysis of published literature.
- Encouraging an open exchange of ideas, including pursuit of the student’s ideas.
- Providing and discussing clear criteria for authorship of collaborative research.
- Clearly evaluating the strengths and weaknesses of the student’s research (and writing) and providing suggestions on how the research (and writing) can be improved.
- Critiquing written work and providing suggestions for data analysis and presentation in a timely manner.
- Checking regularly on progress – set up a meeting schedule to have the student report on any issues they may be encountering
- Encouraging (and if necessary helping) the student to seek and obtain advice and feedback from other committee members and others with appropriate expertise on their research throughout the process of project planning and collection, analysis, and interpretation of data.

As partners in the mentoring relationship, graduate students should:

- Be aware of their own mentoring needs and how they change through their graduate tenure. Graduate students should discuss these changing needs with their mentors as they occur and not wait until the next annual meeting.
- Maintain and seek regular communication with mentors, especially the major professor.
Talk to major professor about best way to contact them for their input

- Provide regular updates to all committee members even when not specifically asked – keep your major professor updated on the project(s)
- Draft outlines of timetable, projects, questions and progress at least once per year to give to the whole committee – set up annual meetings (or more often)
- Ask your major professor if it they are comfortable with you sharing a draft chapter before you send out draft chapters to the rest of the committee

- Recognize that one faculty member may not be able to satisfy all of a student’s mentoring needs. Seek assistance from multiple individuals (e.g., committee)/organizations to fulfill the mentoring roles described above.
- Recognize that mentoring needs must respect the mentor’s other responsibilities and time commitments – i.e., ask for help early

Items to frequently discuss **and update** with your major professor or mentee

Develop a **timeline** for

- Proposed research (start early in year 1) – write & update a research proposal to be discussed frequently with your major professor/mentee (the HRT 203 core course in your 2nd quarter provides excellent preparation for this)
- Courses – preparation for QE
- Data collection (what/when/where/how)
- Data processing
- Writing publications (including authorship discussion)
- Funding (GSR/TA, research costs (Jastro funds) – proposals for support to be submitted)

This timeline may change (a lot) depending on circumstances. You should have this discussion at the start of each academic year, but it is better to discuss aspects of this quarterly and revise the timeline accordingly. This way expectations between students and major professor remain aligned.

**Conflict resolution (see graduate student “bill of rights”):**

- Consider whether there may be a middle ground where you and your major professor may be able to resolve the conflict – generally the MP main concern is to deliver a high quality research publication in accordance with the funding used to support the research
- Ask your academic advisor for advice when concerned about potential conflicts with your major professor
- If you cannot resolve this with the academic advisors’ help – talk to the graduate program chair and/or program coordinator about the conflict
- If this is an issue beyond the GGHA (or where GGHA cannot help you satisfactorily), you can discuss issues/concerns with
- Graduate Studies [https://grad.ucdavis.edu/resources/help-and-support](https://grad.ucdavis.edu/resources/help-and-support)
- Campus ombudsman (The UC Davis Ombuds Office is a confidential, independent, impartial, and informal problem-solving and conflict management resource for all members of the UC Davis and UC Davis Health campus communities – it provides independent advice and coaching) [https://ombuds.ucdavis.edu/](https://ombuds.ucdavis.edu/)

**Finishing & submitting your dissertation (may take several weeks to get together!)**

Carefully read through the **very specific** dissertation formatting and paperwork requirements at [https://grad.ucdavis.edu/academics/finishing-your-degree/filing-thesis-or-dissertation](https://grad.ucdavis.edu/academics/finishing-your-degree/filing-thesis-or-dissertation). There are a lot of forms to file!

“**Pro”** Tip: adjust the formatting of your thesis/dissertation to meet the guidelines while your committee is reading through the thesis/dissertation. Don’t waste a lot of time on this while you are still working on the data analysis and writing.