



Colorado State University
COLLEGE OF AGRICULTURAL SCIENCES

Master of Agriculture

The purpose of the professional paper is to demonstrate the student's knowledge of an issue, topic or discipline related to agriculture and education and to present a paper which will provide the profession with relevant information. The paper may conduct research or be a review and establish a position on existing research and information or may involve collection of data that is analyzed and a conclusion drawn or may provide a relevant product. The paper will contain three chapters, in most cases, and will follow the guidelines presented here. The following is a step-by-step procedure recommended for completion of the professional paper. Please note: the *Publication Manual of the American Psychological Association, Sixth Edition* (2010) is currently being used as the style manual for proper formatting of the professional paper. This is also fairly consistent with guidelines found at <http://graduateschool.colostate.edu/documents/eTD-Formatting-Guide.pdf>

Responsibilities

Advisor's Responsibility

- The advisor serves as a mentor both while the student is doing the work and while the results of the work are prepared for the paper.
- The student has the primary responsibility for the content, quality, and format of the paper, and the advisor must be consulted frequently. The Graduate Advisory Committee (includes the advisor) approves the final document.
- Advisors are asked to insure that the abstract summarizes clearly and concisely the major points of the work.

Student's Responsibility

The student is responsible for making all arrangements for the preparation and submission of the paper as well as any additional copies required by the program. The student should also consider the following:

- First and foremost, create a quality project that consults original research (literature review) and synthesize your own conclusion(s).
- Consult the website and style manual approved by your program for correct format of the paper; use correct sentence structure, grammar, paragraphing, punctuation, and spelling. Prepare tables/graphics in the form in which they are to be printed. Use correct formatting, numbering, and legends for all tables and illustrative materials.
- Work with your advisor to prepare the paper for distribution to the committee. Prepare the presentation for your defense. Set up oral defense. Defend.
- Make corrections as recommended by the committee, the advisor having the final word on the revisions/changes. Proofread final copy. Present the final copy to the advisor for review.
- Prepare and submit the final approved version.

Graduate Advisory Committee members

- Serve on your committee for their interest/expertise in your topic.
- Provide their expertise/advice as needed.
- Assess at the final defense, the quality and content of your project/paper, and sign the official graduate school paperwork. They will provide suggestions for strengthening your project/paper and any needed corrections.

Issue Selection

- Review current journals and research to begin to determine your interests and where needs exist. It is also recommended that you visit with state extension specialists or people in relevant positions regarding topics or issues that may interest you.
- Be alert to topics of interest in class discussions, during internships, and at professional meetings.
- Consider problems you would like to address or solve in your development of the professional paper. Keep the scope of the problem reasonable for the limitations of time, finances, and your own capabilities.
- Select a topic for which you have an interest or passion or it will become a burden by the time you complete the paper.

Issue Approval

- When you have selected an idea or issue and thought the process through, make an appointment with your advisor and discuss it with him/her.
- After you have refined the idea into **an outline** or **“proposal,”** meet with your advisor and get input and agreement.
- After issue selection and/or completion of your outline or “proposal,” a conversation will be set up with the Graduate Advisory Committee for issue approval and feedback or suggestions. (You have selected members for your Graduate Advisory Committee for their interest and expertise in your topic area.)

Approval to Conduct Human Research (from *Evelyn Swiss*, Coordinator, Research Integrity and Compliance Review Office (RICRO), April 2014)

Under the guidelines established by the U.S. Department of Health and Human Services, and in order to protect the University’s privilege to do research, if you will be conducting a project that meets the regulatory definition of “[research](#)” with “[human subjects](#)” you are required to submit a protocol to the CSU Institutional Review Board (IRB) for review and approval, regardless of the source of funding.

Students conducting research with human subjects as a part of their degree requirements **must** receive IRB approval **prior** to conducting the actual research. Protocols are reviewed by the IRB via three different [review processes](#): Exempt, Expedite, or Full board review. For complete details on protocol submission and training requirements:

- IRB website at: <http://ricro.colostate.edu/IRB/IRB.htm>
- Required training information: http://ricro.colostate.edu/IRB/IRB_Training.htm
- Researcher Guidelines: <http://ricro.colostate.edu/IRB/Researchers.html>

The IRB Coordinators recommend that you submit any protocol well in advance of when you wish to conduct your research. Exempt and expedite applications can be submitted to the IRB at any time. [Exempt applications](#) are submitted via email with the Word document form, and [Expedited protocols](#) are submitted via eProtocol, an online protocol submission-and-review system. If your research is considered greater than minimal risk, the protocol will be reviewed by the full IRB at their monthly meeting. Submissions for FULL-BOARD REVIEW must be submitted via eProtocol (<https://csu.keyusa.net/>) by 5:00 p.m. on the second Thursday of the month. The IRB will review the protocol at the meeting on the third Thursday of the month. Plan 3 to 5 weeks for the review process.

Still have questions? Please feel free to contact the IRB Coordinators with any questions you may have about human subjects' research. Contact us at: RICRO_IRB@mail.colostate.edu
Evelyn Swiss: 491-1381; RICRO Main office: 491-1553.

Study Your Issue

- Research and read information available electronically and in print on the topic, noting key words used and databases searched.
- Keep reference information or photocopy key articles and keep them in a folder or **database of articles reviewed** for future reference. (See **database** example and explanation in the template file—**strongly advised and encouraged**.)

Approval of the Outline

- Develop an **outline** of the paper or **proposal** as outlined below. Submit it to your advisor for input and approval.
- The **outline** must be word processed and include brief information regarding the following or you may complete the information described below as a **“proposal”**:

CHAPTER 1 -- INTRODUCTION

Need/Rationale for the Study*

Background/Overview of the Problem

Statement of the Problem and Research Questions or Stated Objectives

Definition of Terms

Relevance or Significance of the Study*

Researcher's Perspective

How will you address the concern? What methods will be used? Will you develop a product (program, course, guideline, checklist, etc.)?

*You may not need both titles/content...

CHAPTER 2 – REVIEW OF THE LITERATURE

Literature Review Strategy (type of review, key words used, databases searched, etc.)

List possible topics and subtopics (titles and subtitles) being addressed in the literature.

CHAPTER 3—METHODOLOGY, RESULTS OR FINDINGS, DISCUSSION, CONCLUSIONS

- For the outline, **IF you will be collecting data, please briefly describe here. Include IRB approval plans/procedures you will follow if humans are involved.**

Preparation of the Professional Paper

- You have prepared an outline of the paper in the previous step that is consistent with this format. The professional paper is the completion of the work as outlined.
- A template for the Professional Paper is provided as a separate file that you can save and use, putting in your own content. **We strongly advise that you use this template file.**

Title page

Copyright page (See sample page in the template)

ABSTRACT

Acknowledgments (optional)

CONTENTS (Table of Contents—see directions in the template)

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- This chapter should include a clear and concise statement of the problem or issue.
- The objectives of the study should be written so the reader understands what you intend to do in the first part of the chapter.
- Elaborate on the issue and why it is important.

CHAPTER 2 – REVIEW OF THE LITERATURE

Literature Review Strategy (type of review, key words used, databases searched, etc.)

List possible topics and subtopics (titles and subtitles) addressed by the literature.

- Provide an explanation of your literature search.
- This chapter should cite specific literature concerning each of the topics in your outline.
- You are to include all relevant literature whether it agrees with your position or not.
- Good writers synthesize rather than follow one direct quote with another.
- Organize the topics logically and/or sequentially.
- **Keep your opinions and ideas out of this chapter. You are reporting what other authors have said/found.**
- As you do the Literature Review, think about a Journal in which you could later publish.

CHAPTER 3—METHODOLOGY, RESULTS OR FINDINGS, DISCUSSION, AND

CONCLUSIONS

- **Possible** headings for Chapter 3 (or you may want to break into Chapter 4 and 5—up to you)
 - Methodology (may include Methods and Materials, Participants, Sample Size, etc. if you collected data)
 - Results or Findings
 - Discussion or Implications for Practice
 - Relevance to Other Disciplines
 - Contribution to New Knowledge
 - Limitations

Conclusions

Recommendations for Practice

Recommendations for Further Research.

Summary

- This is the *synthesis* and *evaluation* by the student of what you have found, your original work/contribution to the knowledge base, based on your entire program/experience. Support your position with the relevant literature; include personal experiences; use your own unique conceptualizations or models or products (in the appendix or as per APA style in chart or graphic format in the paper).
- In this chapter, you will present the findings of your review of literature and study. The findings should be presented in a logical sequence and the use of charts and graphs is helpful.
- You may also state your interpretations of the literature and findings in the conclusions' portion of the chapter. Support your position. State how you agree or disagree with the current literature and why. Present your personal perspectives only after you build a case from the literature.
- The recommendations section may be directed at participants in the study, clientele, or other students who may wish to conduct studies related to yours. This is an important portion of the paper for those who may wish to use the information.
- The summary, if included, should be brief and basically summarize the paper and what you learned from the study.

References

Appendix or Appendices

- Follow *Publication Manual of the American Psychological Association, Sixth Edition* (2010) guidelines for the appendix/appendices as well as for all content of the paper.

Review of the Professional Paper Draft

- Include pertinent parts/headings. Check the Table of Contents for accuracy of page numbers, and check sentence structure, grammar, paragraphing, punctuation, spelling, and format.
- Have at least one person read the draft for errors in grammar and spelling. Have a second person read the paper for content.
- Submit the draft with revisions to your advisor for review. More than one version of the paper is the norm. For each version to be reviewed and returned, **give your advisor adequate time; this can vary from two to three days (not weekend or holidays) and could take up to two weeks for reviewing each version of the paper.**
- Work with your advisor and make final revisions. **Receive approval from the advisor for the paper to move forward to the full committee. The defense/orals will NOT be scheduled until the advisor has a "clean version" of the paper.**

Prepare the Final Draft

- Once your advisor has approved the paper moving forward, the paper must be submitted to your advisor and committee members **at least two weeks prior to the scheduled orals.**

Oral Examination

- The student is responsible for establishing the date, time, and place for the oral exam. Contact committee members and your advisor to schedule the time and date. On campus, the conference room in Shepardson (114) is a good location for oral exams but needs to be scheduled. If you are a distance student and cannot come to campus, you will set up for the video conference. For more details on video conferencing, check with the Dean's Office.
- You should prepare a 15 to 20 minute presentation to begin the oral exam. The purpose of the presentation is to give you the opportunity to present any information you may think pertinent to the paper. Remember that your committee has read your paper.
- The exam is a culmination of your entire program. The purpose of the oral exam is to defend your paper/share a synthesis of what you have learned.
- After the presentation, committee members will ask questions related to your paper and your understanding of the underlying issue(s). You may also be asked questions about other portions of your educational program.
- The meeting should last 1-1/2 to 2 hours.
- Remember you are the expert on your paper.
- Bring your GS24 form to the meeting.

Final Semester Protocol for the Master of Agriculture *(Dr. Nancy A. Irlbeck and Dr. Barbara Wallner)*

In your final semester, you need to familiarize yourself with the graduation deadlines for the semester. Those deadlines are “hotlinked” on the College of Ag website under Graduate School at: <http://studentacademic.agsci.colostate.edu/masters-of-ag/>. Or you can find the same information at <http://graduateschool.colostate.edu/>. Graduate School deadlines are **set in stone and cannot be negotiated**.

Following is an example of how you might set up your final semester. It is **“assumed”** that before the semester starts, you will have met/conferenced with your committee and have a strong grasp of what you are going to write about. It is also assumed that you will have started your literature review to some extent.

The thesis (Plan A Masters) and professional paper (Plan B Masters) formats can be found at: <http://studentacademic.agsci.colostate.edu/masters-of-ag-exteducation/>. You will be held to this format, and if you familiarize yourself with it ahead of time, it will help immensely.

- 1) It is easier to establish your deadline if you work backwards. The graduate school has a deadline for the results of your final exam to be **completed and the GS24** turned in. Remember that not everyone that is graduating can defend at the last minute, so plan ahead and schedule ahead. **Two weeks prior to your defense date**, you will need to have a final version of your paper (approved by your advisor) to your committee.
- 2) Before that time, however, you will work with your advisor (currently, Dr. Nancy A. Irlbeck and/or Dr. Barbara Wallner) to ensure that you have a well-written and correctly formatted paper. That is the duty of the advisor working with the graduate student. Your committee is there to guide you in the content of your paper, so it is your responsibility to

reach out to them for questions as you write. Feel free to call a committee meeting/conference call if you are in need of clarification from the group.

- 3) It is the expectation of your advisor and committee that you will do a thorough and in depth search of the literature for your literature review. If you do not know how to search the literature, you need to work with your advisor immediately. You will be expected to use peer-reviewed and reputable sources of information. Most literature searches for the Master of Ag program contain 50 to 100 citations.
- 4) Another requirement is **four days before your final exam**, you will need to submit to your advisor your completed exam presentation (Power Point or Prezi are acceptable formats). This gives you and your advisor time to ensure that you are adequately prepared.
- 5) Your **oral presentation** should be 15 to 20 minutes long and consist of the following format. The first few minutes should be about yourself and family, if you like, how you arrived at the Master of Ag program, and what you plan to do in the future. After that, describe your project and what you found:
 - a. Introduction and background—include how you found the program and share your future plans
 - b. Description of your project
 - c. Statement of the Problem and Research questions
 - d. Answers to your research questions
 - e. Results of your research
 - f. Summary and conclusion(s) of the research - what you found from your project
 - g. Implications of the research
- 6) Your final exam will be held in a “face to face” setting or via a video conferencing system. Skype and GoToMeeting have not been successful media and are not acceptable. The Master of Agriculture support person (Pam Schell) will help you set up this system. Plan on a three hour time period to allow for the defense and questions. Visitors are allowed during the defense, but will need to be dismissed during the committee questioning.
- 7) A **SAMPLE** timeline would be as follows (using Fall 2015) with a graduate school final exam deadline of November 6th.
 - a. Semester starts on Monday, August 24th.
 - i. If you have not met/conferenced with your committee, do so asap.
 - ii. You should have started your literature review
 - b. August 24th to October 26th— work with your advisor to write your paper. There will be multiple iterations – this is something all students go through – even those that view themselves as good writers. Do not take this personally; it is part of the process. Each time you send your paper to your advisor, allow adequate time for review. Other students are doing the same process. During this time, work with the Master of Ag support person to set up an agreeable time for your final defense

that all members can be in attendance. Start early to ensure the most advantageous time for you.

- c. October 26th – your paper goes to the committee members (allow two weeks).
- d. November 3th – your final exam presentation goes to your advisor allow 4 days).
- e. November 6th – your final exam – DROP DEAD DEADLINE AND CANNOT BE CHANGED! (We advise scheduling a few weeks before this deadline.)
- f. December 11th – bound paper due to Dr. Irlbeck and committee members no later than this date – you may want to check with your committee members as not all want a bound copy and prefer the digital format.

Checklist for Submission of Professional Papers

Paper

- Regular white printer paper is adequate. Do not use lined paper, erasable paper, perforated paper, or paper hole-punched for a binder.

Margins

- Margins are 1” on all sides to allow for binding.
- Page numbers, tables, figures, and appendices do not extend into the left margin.

Photo mounting

- Photographs, if used, need to be scanned or included as digital content.

Visual Quality

- The print is letter quality, and uniform style has been used throughout.
- Final copies are high quality. (Be sure the copies have not picked up spots or smudges during reproduction.)
- Figures, printouts, spectra, etc. are clear and easy to read.
- There is no tape, white-out, handwritten information, etc. on the copies.
- Text is double-spaced and printed on only one side of the paper.

Pages

- Each copy has been checked page by page.
- All pages are present, in the correct order, and right side up.
- Preliminary pages are numbered with lower case Roman numerals.
- Text is numbered with Arabic numerals.
- All figures, tables, photographs, etc. are present and have the appropriate captions.

Submission

- One spiral-bound copy of the final approved document is provided for the College and each committee member. Please check with your committee members as not all want a bound copy and prefer the digital format.