



COLLEGE OF AGRICULTURE AND LIFE SCIENCES
**AGRICULTURAL AND
APPLIED ECONOMICS**
VIRGINIA TECH.

Second-Year Paper Guidelines



In today’s competitive job market, practice and experience in conducting research and the ability to effectively communicate one’s findings in a paper-length format are crucial skills that extend beyond traditional coursework.

A well-trained Ph.D. economist should be able to conduct independent research, which involves multiple steps: identifying a problem or gap in the literature, becoming familiar with the literature, determining the appropriate data and methods to address the problem, conducting the analysis, and writing it up in a paper-length form. It is our belief that this constitutes a minimum standard that all our Ph.D. students and graduates should exceed.

Contacts:

Chunbei Wang, Ph.D. Graduate Program Director
321A Hutcheson Hall
(540) 231-1674
chunbeiwang@vt.edu

Amy Guerin Graduate Program Professional Coordinator
210 Hutcheson Hall
(540) 231-6846
abguerin@vt.edu

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OUTLINE OF SECOND-YEAR PAPER

Starting in the summer of the 1st year, students will start working toward their second-year paper requirement. This will include identifying a *Faculty Advisor* and starting to engage in discussions with the faculty on their planned research.

In the fall semester, second-year students will enroll in AAEC 6004. In this course, during the first seven weeks, second-year students will be introduced to strategies for identifying valuable research ideas, determining whether the research idea is worth pursuing, effectively reviewing the literature, and planning how to conduct research. These activities aim to assist students with developing and producing a formal written proposal for their second-year paper by the end of the semester.

In the spring, second-year students will also be enrolled in AAEC 6004, where they will be encouraged to build on the idea(s) outlined in their paper proposal to produce a research paper by the end of the Spring of their second year.

The student advisor and two anonymous reviewers will review the final version of the submitted second-year research paper.

Here is a brief overview of the process:

1. The proposal: A student's proposal for a research paper must do the following:

- a. Articulate a clear research question and the methodological approach to address that question.
- b. Specify the data/simulations and other resources required to execute the proposal and how these resources will be obtained.
- c. Submit the proposal to the instructor for 6004 along with the name of their advisor and two faculty members with whom you have been discussing your idea by the **LAST DAY OF FALL SEMESTER CLASSES** in the second year.
 - o The student's advisor will evaluate written proposals and must receive a passing grade.
 - o The student advisor will report grades to AAEC 6004 for student accountability. Proposal grade should be reported at least one day before the end of the Fall grading period.
 - o In the event that a student fails the proposal, they will have a chance to "revise and resubmit" their proposal for a second consideration. The deadline to revise and resubmit will typically be by the end of the first week of January (extensions may be allowed in extenuating circumstances, e.g., for medical reasons). Failure to pass the "revise and resubmit" proposal may result in the Second-Year Paper Faculty Advisor(s) recommending unsatisfactory research progress toward the student's Ph.D. and grounds for removal from Departmental and/or grant funding for the Spring semester.

2. The Research Paper: Students will turn in a final version of their second-year paper by the **last day of classes for the Spring semester** of their second year. To guide the students, we provide [DETAILED GUIDELINES FOR THE PAPER](#), which are presented below. The papers will be independently graded by the second-year paper committee, which will be composed of a student's faculty advisor and two anonymous referees assigned by the Agricultural & Applied Economics Department.

3. Timing: See [Proposed Timeline of Important Events \(With Due Dates\)](#) for further information.

4. Procedure For Grading Paper

- The 2nd year paper committee will grade the paper:
 - The committee will be composed of the student's advisor and two anonymous referees assigned by the Agricultural and Applied Economics Department.
 - All committee members will review the paper according to the [Reviewer Guidelines for Second Year Paper](#) using the [Second Year Paper Evaluation Rubric](#) below.
 - [Committee Deliberation](#): The referee reports will be handed to the AAEC graduate committee, who will then make a recommendation. Please see the subheading [Committee Deliberation](#) below that outlines this process.

5. **Failure to Pass the Research Paper:** Students who do not earn a passing evaluation on their research paper will be allowed a chance to “Revise and Resubmit” their research paper over the summer of their second year for a second consideration. Failure to pass the “revise and resubmit” of the research paper will result in dismissal from the PhD program. See the [Proposed Timeline of Important Events With Due Dates](#) for further details.

DETAILED AAEC SECOND-YEAR PAPER GUIDELINES FOR STUDENTS

The paper should introduce a well-thought-out idea for new research. There is no page limit, but we expect a polished and professional .pdf version of their research paper. We would suggest the following general structure - but the student may choose a different one in consultation with their second-year advisor. This structure, and other structures, will be discussed in AAEC 6004 in the Fall semester of the student's second year. Here is an example of a paper structure:

1. Introduction/Motivation of topic
2. Synthesis of relevant literature
3. Theoretical/behavioral/structural model
4. Empirical / Econometric model or simulation/calibration strategy (for a theoretical paper)
5. Description of data and where you collected it. Suggestions on how theory could be tested or operationalized (for a theoretical paper)
6. Empirical Implementation of your model together with results presented in nicely formatted publication quality tables.
7. Empirical Analysis: An explanation of the tables with a clear link back to your research questions and how your results do (or do not) support your proposed research question.
8. Discussion of Results: An explanation of how your results “fit in” to the literature on this topic.
9. Conclusion: The relevance of your findings, your contribution, further questions for research, etc.
10. List of references
11. Appendix (optional)

REVIEWER GUIDELINES FOR SECOND-YEAR PAPER

The paper will be assessed along the following eight dimensions:

1. Motivation of topic - convince the reader that this is a new and important line of research. Why is it important? What are the policy implications (if any)?
2. Thoroughness of literature review/discussion. What literature branch (es) are you drawing from / adding to? What are the key contributions and their findings?
3. Theoretical/behavioral/conceptual model: The more (relevant) detail, the better.
4. Econometric model/simulation: If the envisioned paper is purely theoretical, there should be a simulation/ calibration section that illustrates the workings of your model. The more (relevant) detail, the better. If there is an econometric innovation as well, make sure to stress it!
5. Description of data requirements, data collection steps, and outline of data collection instruments (if survey work is planned). For a primarily theoretical paper, this section should provide suggestions of how the new theory could be implemented/tested in the field.
6. Quality/clarity of equations, graphs, figures, tables.
7. Quality/clarity of writing (style, grammar, logical structure, flow)
8. Quality/completeness of the in-text citations and the reference section.
9. Explanation of your theoretical or empirical findings
10. Discussion of your results within the context of the corpus of research in this area

SECOND-YEAR PAPER COMMITTEE DELIBERATION

Each paper will be reviewed by the student's advisor and two separate reviewers. The paper will be evaluated in the same manner as a paper sent out for peer review. The reviewers will provide a written assessment based on the guidelines (1) - (10) listed above. The review will highlight major revisions expected, minor revisions, and any fatal flaws in the theory, methodology, or empirical implementation. It will conclude with a Pass or Fail (the student will revise and resubmit). The review will be handed to the Graduate Committee, who will notify the student of the department's decision.

SECOND-YEAR PAPER EVALUATION RUBRIC FOR REVIEWERS

Criteria	Excellent 5	Proficient 4	Competent 3	Developing 2	Limited 1
Research Question and Significance	The research question is well-defined, highly relevant, and addresses an important economic issue. It demonstrates a clear understanding of the broader context.	The research question is clear, relevant, and addresses a significant economic issue. The context is well-understood.	The research question is adequately defined, relevant, and addresses an economic issue. The context is mostly understood.	The research question lacks clarity or relevance and may not address a significant economic issue. The context is unclear.	The research question is unclear, irrelevant, or does not address an economic issue. The context is missing.
Literature Review	The literature review is comprehensive, critically evaluates existing research, and effectively positions the paper within the context of prior work.	The literature review is thorough and provides a clear overview of existing research. It effectively positions the paper within the context of prior work.	The literature review is adequate, providing relevant background but with less critical evaluation. It positions the paper within the context of prior work.	The literature review is superficial, lacks critical evaluation, or misses some key literature. It attempts to position the paper within the context of prior work.	The literature review is missing or irrelevant.
Methodology and Data	The methodology is exceptionally well-designed, and data collection/analysis methods are clearly explained, appropriate, and innovative. Data sources are diverse and well-justified.	The methodology is well-designed, and data collection/analysis methods are clearly explained and appropriate. Data sources are relevant.	The methodology is adequately described, and data collection/analysis methods are suitable but may lack some detail. Data sources are mostly relevant.	The methodology is poorly described, and data collection/analysis methods may lack clarity or appropriateness. Data sources may be questionable.	The methodology is missing or inadequately explained. Data sources are missing or irrelevant.
Results and Analysis	The results are presented clearly, supported by rigorous analysis, and directly address the research question. The analysis demonstrates a deep understanding of statistical and economic concepts.	The results are presented clearly, supported by strong analysis, and address the research question. The analysis demonstrates a good understanding of statistical and economic concepts.	The results are presented clearly, supported by adequate analysis, and generally address the research question. The analysis shows a basic understanding of statistical and economic concepts.	The results may lack clarity, are weakly supported, or only partially address the research question. The analysis demonstrates a limited understanding of statistical and economic concepts.	The results are unclear, unsupported, or irrelevant to the research question. The analysis lacks an understanding of statistical and economic concepts.

Discussion and Conclusions	The discussion is insightful, drawing meaningful conclusions from the results and relating them to the research question. Implications are well-explained.	The discussion provides meaningful insights and conclusions drawn from the results, relating them to the research question. Implications are explained.	The discussion provides adequate insights and conclusions related to the results and the research question. Implications are mentioned.	The discussion provides limited insights and conclusions that may not fully relate to the results or the research question. Implications are unclear.	The discussion lacks meaningful insights or conclusions, and implications are missing or irrelevant.
Organization and Clarity	The paper is exceptionally well-organized, with a clear structure and seamless flow. Writing is highly polished and free of errors.	The paper is well-organized, with a clear structure and good flow. Writing is well-polished and mostly free of errors.	The paper is adequately organized, with a discernible structure and decent flow. Writing is generally well-polished with minor errors.	The paper's organization may be somewhat unclear, with occasional disruptions in flow. Writing may contain notable errors.	The paper lacks organization, with an unclear structure and poor flow. Writing contains numerous errors.
References and Citations	References are extensive, properly cited, and consistently follow a recognized citation style (e.g., APA, MLA).	References are thorough, properly cited, and mostly follow a recognized citation style.	References are adequate, properly cited, with minor citation style issues.	References are limited or improperly cited with noticeable citation style issues.	References are missing or irrelevant.
Overall Impression	An outstanding term paper that significantly contributes to the field of economics.	A very strong term paper with clear contributions to the field of economics.	A competent term paper that meets expectations for the level of study.	A somewhat below-average term paper with room for improvement.	An inadequate term paper that falls short of expectations.

PROPOSED TIMELINE OF IMPORTANT EVENTS WITH DUE DATES

Year in the Ph.D. program	Date/Semester	Deadline (Suggested activities)
1 st year	<i>Summer (June-Aug)</i>	<ul style="list-style-type: none"> ● Search faculty advisor(s) based on research interests ● Match with a faculty to identify research question(s), which may be independent or come from a research project of the Faculty
2 nd year	<i>Fall (Sep-Dec)</i>	<ul style="list-style-type: none"> ● Try to refine and fine-tune the research question(s) ● Identify a 2nd-year faculty advisor(s).
	<i>Last day of the Fall semester</i>	<ul style="list-style-type: none"> ● Submit a 5-page proposal to the professor of AAEC 6004. ● The 2nd year faculty paper advisor will provide feedback by the end of the grading period. ● Failing this portion will result in a failing grade for AAEC 6004 and grounds for removal from Departmental and/or grant funding for the Spring semester.
	<i>Spring (Jan-May)</i>	<ul style="list-style-type: none"> ● Expand the 5-page proposal to a 20-25 page prospectus (paper) ● See above for the <i>suggested</i> 2nd year(prospectus) paper evaluation rubric. ● The AAEC Department appoints two faculty members to make a total of at most three people, including the primary advisor, to review each student's second-year paper.
	<i>Last day of Spring semester</i>	<ul style="list-style-type: none"> ● Submit the 20-25-page prospectus (paper) to the instructor of AAEC 6004.

Year in the Ph.D. program	Date/Semester	Deadline (Suggested activities)
	<i>Summer</i>	<ul style="list-style-type: none"> ● The instructor of AAEC 6004 sends the paper to the second-year faculty advisor and two faculty reviewers. ● The three members of the 2nd year paper committee provide comments and recommendations on the <i>Pass & Fail/Resubmit</i> outcome of the student's paper (by the end of June). ● The recommendation goes to the graduate committee. ● <u>Outcomes:</u> <ul style="list-style-type: none"> ○ Pass: Student will move on to summer research activities/3rd year ○ Fail: Student will work on their 1st Revise & Resubmit and submit revisions by early/mid-August
3rd year	<i>Fall</i>	<ul style="list-style-type: none"> ● The 2nd year paper committee reviews the revised prospectus and gives another decision (by early September) ● <u>Outcomes:</u> <ul style="list-style-type: none"> ○ Pass: Student will move on to 3rd year activities ○ Fail: Removal from PhD program with a possible non-thesis M.S./thesis M.S. over Fall of 3rd year with/without department funding.