

# COLLEGE OF AGRICULTURE, COMMUNITIES, AND THE ENVIRONMENT

College of Agriculture, Communities, and the Environment
Kentucky State University

**Graduate Student Handbook** 

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#### INTRODUCTION

The Kentucky State University (KSU) College of Agriculture, Communities, and the Environment (ACE) offers a Master of Science in the Aquaculture/Aquatic Science and a Master of Science in Environmental Studies (MES).

The goal of the KSU MES program is the pursuit and dissemination of knowledge in the interdisciplinary field of environmental studies. The program broadens the scope of scientific and technological studies of the environment, taking a multidisciplinary approach that encompasses ecological principles, as well as social and legal aspects of environmental concerns. The field includes, but is not limited to, studies of toxicology, environmental degradation, population and community ecology, ecological modeling, regional ecology, water and air pollution, waste management, ecological and environmental economics, and aquatic, terrestrial, and wetland systems. The program emphasizes applied research and teaching on ecological processes and effects to address current environmental issues facing the Commonwealth and the nation, such as sustainable crop production, food and water security, and climate change.

Graduates of KSU's MES program are expected to hold positions as environmental professionals in state and local government agencies, colleges and universities, and in nonprofit and private enterprises; some students will use the MES program to prepare for doctoral studies in related environmental fields. The MES program produces graduates who can provide critical leadership in improving the overall quality of life for all people, locally and internationally, as they adapt to changing environments. The program is designed to appeal to students seeking meaningful employment with a commitment to human values and prepare them for a wide range of jobs and leadership opportunities.

KSU's Master of Science in Aquaculture develops expertise in the rearing of aquatic organisms under controlled or semi-controlled conditions. Interest in aquaculture has increased worldwide as fish consumption has increased and capture fisheries have declined. In Kentucky and the southern United States, aquaculture programs focus on commercial production of freshwater and marine species. The Master of Science in the Aquaculture/Aquatic Science meets criteria established by the University Programs Standards Committee of the American Fisheries Society for Fish Culture Specializations.

The Master of Science in Aquaculture program is designed to provide students with the

training and experience required for immediate employment and the academic foundation for further graduate studies. Upon completion of the program, a student should have knowledge of production and reproduction of primary aquaculture species, basic physiology and nutrition of aquatic vertebrate and invertebrate culture species, mechanics and operation of primary production methods, causes and controls of pathogenic organisms, the function and manipulation of biological and chemical cycles in ponds, basics of marketing and business aspects of aquaculture, and the design and analysis of experiments.

Both the Master of Science in the Aquaculture/Aquatic Science and MES graduate degree programs have non-thesis and thesis options. The thesis demonstrates creativity, dedication, and ability to work independently. It should make a significant scholarly contribution. A thesis must be the result of the student's own research, analysis, and writing, and generally must be the work of a single author. Successful theses must meet the requirements of ACE. The purpose of this Guide is to explain and demonstrate those requirements, to direct the student in following the required steps, and to help the student comply with the necessary deadlines. Each student will have a graduate committee. This committee will be responsible for designing the student's course of study and assessing student's competencies based on comprehensive evaluation, and thesis or non-thesis presentation and defense.

#### GENERAL RESPONSIBILITIES OF GRADUATE STUDENTS

#### **Academic Honesty**

All forms of academic dishonesty are prohibited. Academic dishonesty includes cheating, the intentional use of unauthorized materials, information, or study aids, fabrication, assisting in dishonesty or tampering and plagiarism (including self-plagiarism, which is extensive repetition or copying of one's own words from a previous work). Plagiarism includes: not using your own words or changing word order only instead of summarizing or paraphrasing; quoting extensively with or without proper punctuation and citation; not citing sources for information that is not common knowledge; and reusing your own past assignments (for additional information on plagiarism, please see the KSU description of academic honesty at:

http://kysu.edu/administration-governance/academic-affairs/registrar/academic-honesty/ and the Kentucky Academy of Science's definition of plagiarism at: https://kyscience.org/). Demonstrate

honesty and integrity in all aspects of your academic work.

Students must obtain permission from the author or publisher of copyrighted materials used in a thesis beyond the limits of the "fair use" doctrine. The student includes appropriate acknowledgment in the manuscript and is responsible for any payment. The student is responsible for any copyright violations. An explanation of copyright law and fair use, along with a guide to obtaining written permission from copyright owners, may be found in The Chicago Manual of Style. Chicago: The University of Chicago Press (available in the KSU Blazer Library reference section) and on several university websites (e.g., https://www.lib.umn.edu/copyright/fairuse). The general fair use practice is that quotation of a brief prose passage or several lines of verse does not require permission. In any case, the student must quote accurately and credit the source.

#### **Minimum Grade Requirements**

Graduate students must maintain satisfactory progress in course work and in thesis research. All graduate students must maintain a minimum cumulative grade point average (GPA) of 3.0 or greater. If the student's overall GPA falls below 3.0, they will be placed on probation. If the student is unable to raise their GPA above 3.0 after an additional semester, the student may lose their assistantship. Advisors are urged to discuss performance in the laboratory and classroom with their students on a quarterly basis.

#### **Equipment and Facilities**

Not all labs have the same or all needed equipment. If you must borrow equipment, you must first request permission, then make sure you return it to the same place you found it. Never assume it is acceptable to borrow something without asking. Equipment should be returned in the same (or better) condition.

#### **Keys**

Keys may be issued for after-hours use and must be returned at the completion of your program. Lost keys must be reported promptly.

#### Vehicle Use

Graduate students who are paid a stipend or assistantship by KSU can drive KSU vehicles provided they have a valid driver's license. Graduate students must provide a copy of their valid driver's license and follow any rules established by ACE for the use of a University vehicle. Please check with the ACE Associate Research Director for any additional requirements or vehicle request forms that may be required before you drive a vehicle. Graduate students must have a valid driver's license and undergo training before they are allowed to operate utility task vehicles (UTVs or "Gators"). All riders must wear United States Department of Transportation (USDOT) approved helmets.

#### **Laboratory Safety Training**

Safety training must be scheduled with the KSU Safety and Compliance Officer.

#### **Financial Support Source of Funds:**

Funds for the support of graduate research assistants (GRAs), traineeships, and student research are generally provided by the research grants of faculty advisors. Your duties will likely be tailored to conduct specific research that leads to the completion of your degree. Students are responsible for paying their tuition bills within the university's deadline. Any questions should be directed to the Bursar's Office.

#### **Graduate Research Assistants:**

It is expected that GRAs will fulfill the following duties as assigned by their graduate advisors. The student and advisor should meet at least once every Spring, Summer, and Fall semester to complete the Graduate Student Evaluation Form (Appendix A and B).

All graduate assistants are required to:

- Perform the full duties of service as determined by the department and major advisor;
- Be responsible for understanding and satisfying all registration requirements outlined in the KSU Online Catalog;
- Be enrolled in a minimum of 9 credit hours each spring and fall semester of their appointment during the academic year;

- Work 20 hours per week on non-thesis work during the spring and fall semesters and
   37.5 hours each week during the summer, or other schedules agreed to by the student and the major professor;
- Devote 100 percent effort to the successful completion of the MES/MS studies and research;
- Perform duties as assigned by your faculty advisor; AND
- Be making satisfactory progress toward an advanced degree.

The graduate advisor or department chair may require a graduate student to limit his or her outside employment or tutoring activity if, in the view of the department, such activity is impeding the graduate student's academic progress of keeping him or her from fulfilling responsibilities within the department.

#### Time Limitation of Assistantships:

Full-time graduate students are expected to complete the requirements for the M.S. degree within 2 years and part-time graduate students are expected to complete the requirements within 4 years. Graduate Research Assistantships (GRAs) are generally awarded yearly for a maximum of 2 years. The master's degree program must be completed within six years of initial enrollment as a degree-seeking graduate student. Please also see the University policy on this topic in the KSU Graduate Studies Catalogue.

#### **Termination from GRA Program**

Employment at Kentucky State University as a Graduate Research Assistant is considered "at will." Termination of employment may be initiated at any time by the graduate student, the graduate student's advisor, the Coordinator of the MES program, the Coordinator Chair, Division of the Aquaculture Science program, or the Director of the Land Grant Programs.

At the time of termination, the graduate student must relinquish all property of the College of Agriculture, Communities, and the Environment (ACE) and Kentucky State University (KSU). This includes, but is not limited to, any and all equipment and keys to

buildings and/or vehicles accessed by the graduate student.

Furthermore, at the time of termination, the graduate student's advisor must inform the Fiscal and Compliance Director of the date of termination so that a graduate student's stipend can be terminated.

#### **Graduate Committee:**

The Graduate Committee consists of three ACE faculty, and can include one additional member from outside of ACE. Any committee member who is not a faculty member of KSU (holding either a regular or adjunct faculty position) must be listed as *Ex Officio* on all theses and committee forms. *Ex Officio* committee members may not vote on committee decisions. Any committee members completing the steps to become an adjunct faculty member may vote on committee decisions. The major professor will guide the student on research, analysis, writing, and other scholarly aspects of the work. While all members of the student's committee contribute, the primary responsibility is that of the major professor.

Students are required to form their committee during their first semester and hold their first committee meeting before the end of the first semester of study. The plan for student research must be discussed and agreed upon at this meeting.

Submission of a thesis or Capstone manuscript is defined as the time at which the first complete draft of such is submitted to the major professor for review. After the major professor approves the draft for committee revision, the student will then submit the manuscript for critical review. Each may suggest improvements and refuse approval pending additional work. When committee members and the major professor sign the Approval Page, they certify that the thesis or Capstone manuscript is clear and accurate, that it represents an original and worthwhile contribution, that the suggestions made by them are incorporated into the final work, and that the work conforms to the standards of KSU ACE. No faculty member will sign a thesis until it is of foremost quality and meets all requirements.

The major professor and committee members must sign their names personally. There can be no temporary substitute members and no other person may sign a committee member's name on an Approval Page, even with the authorization of the committee member involved and the major professor.

#### Thesis/Capstone Proposal:

All MES and Aquaculture students will submit a thesis/capstone project proposal to the student's faculty advisor and committee members. This proposal must be submitted and presented to the committee at a meeting no later than the first half of the second semester. All research must fit within established funding programs supporting the student's faculty advisor.

The proposal must include the following sections and use a standard font (e.g., Times New Roman, Arial) with font size of 12:

Title Page (Example in Appendix C)

Abstract (optional; example in Appendix C)

Table of Contents (optional)

Introduction

Literature Review

Objectives

Hypothesis

Materials and Methods (provide details on what you are going to do and how you are going to do it, the proposed experimental design and statistical analyses, and the timeline)

**Expected Outcomes** 

References Cited

The student and committee should agree upon a specific journal format for the proposal.

Formatting and reference style of the proposal must follow the Instructions for Authors for the agreed-upon journal.

A copy of the proposal must be attached to the fully executed (signed) Thesis Proposal Form for submission to the Aquaculture or MES Program Coordinator.

#### Written Comprehensive Exams:

All MES and Aquaculture students will complete a written comprehensive exam to be administered by the faculty advisor with questions from the student's faculty advisor and committee members. This exam must be administered before the student defends. The majority of the committee members must award a passing grade to the questions that they have provided.

#### **CURRICULUM LADDERS**

The MES degree program requires at least 36 graduate semester credit hours and no more than 45 graduate semester credit hours. Curriculum ladders depend on whether the student will complete the non-thesis or thesis option.

# **MES Capstone Option:**

First Year

ENV 503 Student Team Project ENV 509 Biostatistics <b>OR</b> ECO 501 Statistical Methods Elective Total	3 3 9
ENV 509 Biostatistics <b>OR</b> ECO 501 Statistical Methods Elective Total	3
Elective Total	
Total	
	9
Spring	Hours
ENV 699 Capstone Project	3
Elective	3
Elective	3
T-4-1	9
	Elective Total

#### First Year

Fall	Hours	Spring	Hours
ENV 501 Intro. to Env. Studies	3	ENV 503 Student Team Project	3
ENV 502 Population &	3	ENV 509 Biostatistics OR	3
Community Ecology		ECO 501 Statistical Methods	
Elective	3	ENV 600 Research <sup>†</sup>	3
Total	9	Total	9
econd Year			

Fall	Hours	Spring	Hours
ENV 511 Energy & the	3	Elective	3
Environment			
ENV 600 Research <sup>†</sup>	3	ENV 600 Research <sup>†</sup>	3
Elective	3	ENV 601 Thesis	3
Total	9	Total	9

<sup>\*</sup>All electives are subject to change and availability.

<sup>&</sup>lt;sup>†</sup>Up to nine research credits may be taken each semester to give graduate students full-time status while thesis research is in progress.

The Master of Science in the Aquaculture/Aquatic Science does not have a curriculum ladder. The courses taken by the student are determined by the student, the advisor, and the committee. The thesis option requires at least 35 credit hours (29 course hours plus 6 credit hours of Research and/or Thesis graduate semester credit hours) and no more than 45 graduate semester credit hours. The non-thesis option requires 38 total hours (35 course hours and 3 credit hours of Internship).

#### DEADLINES

ACE follows the calendar dates listed in the Kentucky State University Academic Calendar listed on the Kentucky State University home web page. Students who expect to graduate must submit an Application for Degree the semester prior to the semester of graduation by the deadline indicated in the Academic Calendar. This form is available on the KSU website at: <a href="http://kysu.edu/administration-governance/academic-affairs/registrar/forms/">http://kysu.edu/administration-governance/academic-affairs/registrar/forms/</a>. These deadlines are important and exceptions seldom will be permitted. Failure to meet these deadlines may result in postponement of graduation and a second payment of the graduation fee.

#### RESPONSIBILITIES (NON-THESIS TRACK)

Full-time employees in local, state, or federal government and government agencies may elect to pursue the capstone option. The responsibilities for the student in a capstone or non-thesis track are the same as for those below for thesis track students, except that there is not a requirement for a literature review and binding of the thesis. Additionally, the committee may require a less rigorous research project than for a thesis track student.

#### RESPONSIBILITIES (THESIS TRACK)

The student works under the guidance of a major professor with a committee of faculty members; however, the obligations of research, accuracy, writing, and quality of the thesis rest with the student. KSU's Office of Educational Support, Academic Center for Excellence offers Writers' Workshops (<a href="http://kysu.edu/academics/acade

support/ace/workshop-series/) that may help students develop their writing skills.

The student's minimum responsibilities include:

- Thorough and original research and analysis.
- Organizing and presenting well-written material accurately and usefully in clear and correct English.
- Following correct form in quotations, footnotes or endnotes, bibliographical citations, and illustrative materials.
- Ensuring that all steps for final approval are taken on time, including the filing of the necessary forms as outlined in this guide.
- Ensuring that the work is entirely the student's own except where reference is made to the work of others.
- Inclusion of a review of the pertinent literature (as designated by the committee).
- Making corrections suggested by the examining committee and required by ACE, where appropriate.
- Checking final copy for errors before the final examination.

#### STEPS TO AN APPROVED THESIS

The student researches and prepares the thesis under the guidance of the major professor and with the advice of members of the committee. The first draft is submitted to the major professor, who may deem it adequate or may order corrections, further research within the scope of the proposal, or other work. When the major professor is satisfied with the thesis, a copy is circulated among the committee members, who may request additional corrections or work. The student then prepares a draft incorporating all changes and corrections. A format check will be required only for final approval. If errors then are detected, the thesis will be returned to the student. This may delay graduation, since the student will have to make needed corrections.

Upon the student's successful completion of the thesis and the final draft of the thesis that meets their approval, the major professor and the committee members formally approve by signing the thesis Approval Page. The Provost must also sign off, after committee members have signed. There must be four original copies of the Approval Page and each member of the

committee must sign all four copies. The student can purchase more copies on their own. The Approval Page with original signatures and signed copyright page must be submitted for insertion into the bound thesis.

The major professor and the committee members normally will sign approval pages at the final thesis defense. However, they may delay signing if they determine that additional work still is required. In that case, it will be necessary for the student to obtain the signatures when all work is completed to the satisfaction of the major professor and the committee. The student must remember that there can be no substitute committee members and no one may sign for an absent committee member or copy a committee member's signature. When all work is completed and the signatures obtained, the student takes the approved final copies to the ACE Science and Technology Editor for the final format check and approval.

At least four copies of the corrected thesis must be bound; two are to be retained by the library, one by the student, and one by the student's major professor. The student may desire additional copies. Each copy to be bound must be turned in to the Division Chair and must include an Approval Page. However, original signatures are necessary only on the copies required for the library, the student, and the major professor. ACE will pay binding costs for four copies of the thesis; the student has the responsibility and expense of having any additional copies bound.

#### MANUSCRIPT REQUIREMENTS

The student must present a well-written and error-free manuscript. The final document provided to the Division Chair must be of professional quality with text and illustrations clear, sharp, and suitable for publication.

Manuscripts may be presented in either electronic or paper format. Electronic thesis format is preferred to accelerate workflow within the university and provide easier access to outside audiences. Electronic formatting also allows generation of theses that can include color diagrams, color images, hypertext links, audio, video, animations, spreadsheets, databases, simulations, and virtual reality worlds. Electronic documents are cost-effective for both students and the university.

#### STYLE MANUALS AND SOFTWARE

In addition to this Guide, the student follows the style from a recognized journal within their field of study. Information on the proper style manual, journal, or computer software should be obtained from the major professor. The student must indicate the journal and the computer software used. This is done on a separate page which follows the Acknowledgment page. If the thesis includes multiple papers or manuscripts submitted (or to be submitted) to a peer-reviewed, scholarly journal, all journal styles should be listed.

#### Margins

Illustrations of margin requirements are in Appendix D.

- Top, bottom, and right: one inch. Left: one and a half inches. The extra space on the left is necessary for binding.
- On the first page of a major division such as a chapter, the bibliography, etc., the top margin is two inches.
- All tables and figures must conform to the margin requirements even if photographic reduction is necessary.
- An exception to the bottom margin requirement may be made when a subhead is near the bottom of the page. A subhead must have at least two full lines of type below it.
   Otherwise, the page should be left short and the subhead placed on the next page.
- Another exception to the bottom margin rule may be made when a paragraph begins near the bottom of a page. The paragraph must include at least two lines of type on that page and two lines of type on the following page. Otherwise, the paragraph should begin on the following page, which will leave the previous page short of copy.

#### Spacing

Double spacing, or a near approximation of double spacing, should be used in the general text and the Vita, Abstract, and Acknowledgments (Examples in Appendix D). Spacing on other prefatory pages such as the Approval Page, Title Page, and Copyright Page should follow the examples in Appendix D. For the remainder of the thesis, the student will use the spacing required by the appropriate style manual, journal, or computer software.

#### Page Numbering

Preliminary pages, such as the Table of Contents, the Abstract, and the Vita, are numbered in small Roman numerals centered an inch from the bottom on all pages involved.

- 1. The pages of the body of the thesis, including text, bibliography, etc., are numbered in Arabic numerals.
- 2. All thesis pages should be numbered at the bottom center of the page.
- 3. All page numbers stand alone, without punctuation.
- 4. The Approval Page and the Title Page are not numbered. The Approval Page is considered to be page Roman numeral i, although the number does not appear on the page. The Title Page is understood to be page Roman numeral ii, although again the number does not appear on the page.
- 5. The thesis must include a Copyright Page, which will be page number iii, and the number should be included on the page. This is the first page in a thesis on which the page number appears.

#### Copy

The final copy must be printed on one side only on at least 25% cotton paper. Please use a standard font (e.g., Times New Roman or Arial) and font size of 12. Italics should be limited to commonly accepted usages, such as scientific binomials, and are not employed for chapter titles, subheads, and similar items. Boldface is not used in the preliminary pages.

There will be no paper copies of a thesis/dissertation issued by the Graduate School. It is the student's responsibility to determine if the committee and the department require a paper copy and to provide it.

#### ORGANIZING THE THESIS

The Approval Page (Example in Appendix D)

The Approval Page is not numbered but is understood to be page Roman numeral i when totaling the number of typed pages for the Abstract.

The Approval Page should state: Except where reference is made to the work of others,

the work described in this thesis is my own or was done in collaboration with my advisory committee.

The statement must be followed by the student's signature and typed name centered within the left and right margins. The name and signature of the committee chair (Major Professor) should be centered below the student's name, followed by the words "Committee Chair," "Committee Chairman," or "Committee Chairperson" as desired. The All other committee members' names must be included in two columns beneath the student and committee chair. The names must be typed as the committee members sign their names; academic title and department follow. There should be no commas at the end of the title lines, and administrative titles, such as "Head" or "Dean," should not be used for committee members. Information below the line cannot be longer than the line. The name and signature of the Program Chair, Dean, and Provost must be included after the committee members. Please see sample pages in Appendix B for layout of the Approval Page.

For any committee member not employed at Kentucky State University, the institution employing the person (and the name of the city and state) should also be listed, along with the individual's academic rank or position. *Ex Officio* committee members should be noted as such.

All original signatures must be in black or blue ink.

#### The Title Page (Example in Appendix D)

The Title Page is not numbered. However, it is understood to be page Roman numeral ii when counting the total number of pages for the Abstract. If two or more lines are required for the title, they must be in inverted pyramid style and double-spaced. The date on the Title Page must be the date of graduation (which is listed on the Academic Calendar). A title should be a meaningful description of the content. Avoid oblique references, formulas, symbols, superscript, subscript, and Greek letters.

#### The Copyright Page in a Thesis (Example in Appendix D)

The Copyright Page is Roman numeral iii in theses and is the first page on which a number appears. The signature must be original and the date must be the date of graduation.

#### The Vita (Example in Appendix D)

The Vita is optional. The Vita, if used, will be Roman numeral iv in a thesis. The Vita may contain the full name of the student, the parents' names, the date and place of the student's birth, and a brief summary of academic training and experience. The student's non-academic training may be included if relevant to the field of specialization. The Vita may also contain information regarding marriage and children. It must be written in the third person as one long paragraph and limited to one page.

#### Abstract (Example in Appendix D)

The Abstract will begin on Roman numeral v in a thesis if a Vita is included. The Abstract is a concise summary and is limited to two pages. None of it should be copied from the text. It should report only the essential characteristics of the study, describing the problem, procedure or method, results, and conclusions. References should not be included in the Abstract.

Degrees earned should be listed in reverse chronological order, single-spaced. The date for the degree being conferred is the date of graduation, which is listed in the academic calendar for the semester of graduation. The total number of typed pages includes the prefatory pages such as the Approval Page, the Title Page, the Copyright Page in a thesis, the Vita, the Abstract, the Acknowledgments Page, if used, as well as the text, bibliography or other reference list, and appendices.

#### Acknowledgments (Example in Appendix D)

The Acknowledgments Page is optional. An Acknowledgments Page, if used, follows the Abstract. Only one page is permitted and it continues the Roman numeral numbering sequence. The page must be included in the draft copy if it is to be accepted in the final copies. Appropriate comments might include a statement acknowledging the contributions of others, including the advisory committee and collaborators. It is particularly important to acknowledge anyone who contributed to the student's work, including co-authors of manuscripts submitted, or to be submitted, for publication, anyone who provided technical support, and anyone who assisted with analyses performed as part of the research. In addition, any funding agency that supported the research should be acknowledged (including provision of the grant number).

Style Manual Page (Example in Appendix D)

The Style Manual page follows the Acknowledgment Page. The student must indicate the journal format and the computer software used. This is done on a separate page, which follows the Acknowledgment Page. Page numbering continues the Roman numeral numbering sequence. Please select a single journal style even if multiple papers are included in the thesis.

#### **NOTE**

The format of the table of contents, lists of tables or figures, the main body of the thesis including all illustrative material such as figures and tables, documentation of sources, and appendices must adhere to the guidelines in the style manual or journal preferred by the student's department. Please use a standard font (e.g., Times New Roman or Arial) and font size of 12.

Table of Contents (Example in Appendix D)

The Table of Contents must accurately reflect the outline and organization of the thesis. It continues the Roman numeral page numbering sequence and follows the Style Manual Page.

Lists of Tables and Figures (Example in Appendix D)

These lists provide the exact titles and page locations of all illustrative material. These lists continue the Roman numeral page numbering sequence and follow the Table of Contents. These lists should be separated into tables and figures and be on different pages (see examples).

The Main Body (format directed by advisory committee). As noted in the Page Numbering section of this Handbook, the pages of the body of the thesis, including text, bibliography, etc., are numbered in Arabic numerals.

If appropriate, the following format may be used.

Chapter I

Overall Thesis Introduction and Literature Review:

The introduction should include a clear statement of the student's purpose or hypothesis to be tested, an overview of the problem or subject as it is known from the literature, and a broad statement summarizing the findings of the student's study. The literature review should be composed of a comprehensive review of all background knowledge and circumstances pertinent to the subject of the thesis. It should include a thorough discussion and full literature review (normally considered too long for journal articles and other academic publications). Presentation and mastery of this material is a critical component of the student's development as a scholar and it is important to the growth of the discipline. The review should provide a unique and valuable reference resource for other scholars in the field of study. Statement of research objectives (if not explicitly stated in the literature review) should consist of a concise series of specific objectives to be addressed by the research published in the thesis.

#### Chapter II (III, IV)

Publishable Manuscripts (including Abstract, Introduction, Materials & Methods, Results, and Discussion in scientific disciplines):

Each of these chapters represents a single manuscript (usually a paper or manuscript submitted or to be submitted to a peer-reviewed, scholarly journal). Each manuscript should be written according to the guidelines of the publication or journal to which it was or is to be submitted with the following exceptions:

- A. Each chapter should begin with a title page that includes the chapter title and continues with the text. No other information, such as author's names, should be included on chapter title pages. The format for the title page for each chapter should be identical.
- B. References, tables, figures, and legends (if included) should be of the style, format, and inserted into the chapter(s) in accord with the publication or journal where the manuscript may be sent for consideration for publication.
- C. In addition to a reference list for each chapter, all references to published literature should be cited by author's name(s) and year in a cumulative alphabetical list after the

- conclusions as described below.
- D. Only full papers can be included as a chapter of a thesis. Chapters that have been submitted as rapid publications, short papers, brief reports or letters are not sufficiently detailed for inclusion in the thesis chapter format. The abbreviated styles accepted by some journals must be rewritten as full papers to be included as chapters and should include sufficient detail to replicate the research presented.
- E. The inclusion of one or more additional chapters of material, in the format described, that are unlikely to be published separately, is permitted provided that the same rules regarding format are observed.

#### Overall conclusion (if not explicitly stated in the discussion):

The discussion/body or last chapter section should be followed by an overall conclusion. The section should be composed of a brief restatement of the important conclusions presented in the thesis. This section is particularly important and should be somewhat longer if a chaptered format is used since this is the only section that will describe the importance of the overall work in a comprehensive manner.

#### Cumulative bibliography:

A cumulative bibliography should appear in one location at the end of the thesis ahead of any appendices and should be cumulative for all cited references. All citations in the bibliography should be listed alphabetically and should conform to a single format that is accepted as standard within the student's discipline, as determined by the student's advisory committee (numbered citations in the text are not acceptable). Each chapter/manuscript should also have its own literature cited section as described by the journal.

#### Appendices (as required):

Appendices may be included as a means to publish relevant ancillary data or discussion that is not directly related to the unifying theme of the thesis. The majority of such work must still represent the work of the student and can include supporting data, materials or discussion not included in the body/chapters or other work completed by the student that is not included in the

main thesis. The format can include individual figures with legends, text alone, or whole chapters. The same format rules apply to the rest of the thesis also apply to appendices. Any references included in the appendices should be included in the comprehensive bibliography.

The first page of the main body of the manuscript is numbered with Arabic number 1 and all subsequent pages are numbered with Arabic numerals. These include additional chapters/manuscripts, conclusions, cumulative bibliography or other references, and appendices.

#### References/Literature Cited

Each thesis must include references to document the text within each chapter as well as in the cumulative bibliography. Formatting of cited references must follow the requirements of the journal listed on the style page.

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# APPENDIX D: THESIS FORMAT AND PAGE EXAMPLES

(Example Proposal Abstract)

#### PROPOSAL ABSTRACT

Juvenile Kentucky-strain blue catfish, *Ictalurus furcatus*, with an average initial weight of 39.0 g, were stocked into  $3.5\text{-m}^3$  floating cages at a rate of 250 fish/cage and fed one of three diets. Diets contained either 29, 33, or 38% protein. Fish were fed all they would consume in 40 min for 139 days. There were three replicates per diet. At harvest, there were no significant differences ( $P \ge 0.05$ ) in final individual weight, percentage weight gain, survival, and specific growth rate among treatments and these parameters averaged 127 g, 227%, 97%, and 0.85%/day, respectively. Our study suggests that a non-domesticated strain of blue catfish from Kentucky can be fed a diet with 29% protein when growth in cages. This may allow producers to reduce feed costs and increase profits.

# APPENDIX C: PROPOSAL FORMAT AND PAGE EXAMPLES

(Example )	Proposal	Title	Page'
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# NUTRITIONAL REQUIREMENTS OF THE BLUE CATFISH (Ictalurus furcatus)

Charles E. Brown

A Thesis Proposal

Submitted to

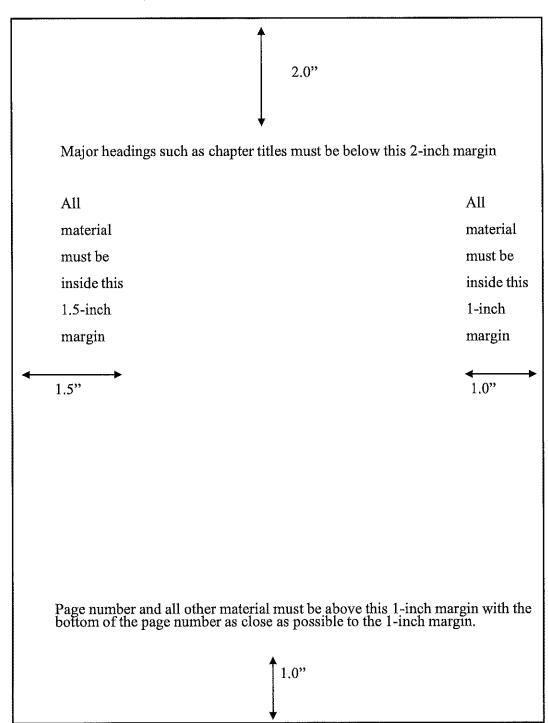
The Graduate Committee

Frankfort, Kentucky

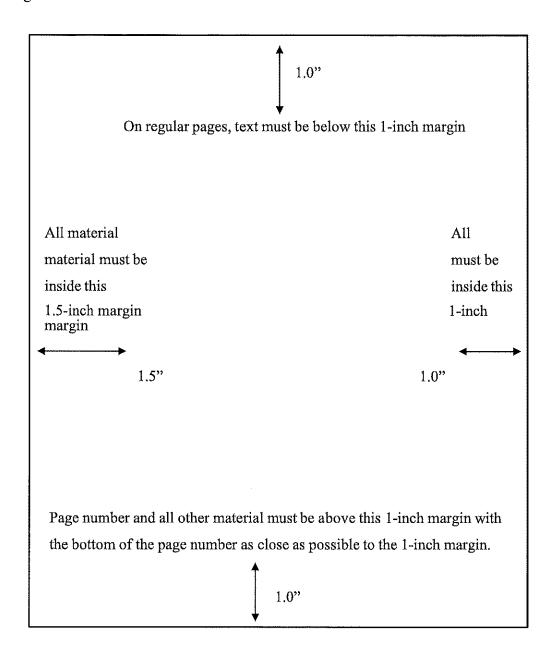
June 8, 2012

#### ILLUSTRATION OF MARGIN

# REQUIREMENTS First Page of a Major Division



# Regular Pages



# (AQUACULTURE EXAMPLE FOR THREE PEOPLE ON THE COMMITTEE)

# NUTRITIONAL REQUIREMENTS OF BLUE CATFISH (Ictalurus furcatus)

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# NUTRITIONAL REQUIREMENTS OF THE BLUE CATFISH (Ictalurus furcatus)

Charles E. Brown

A Thesis

Submitted to

The Graduate Faculty of Kentucky State University in Partial Fulfillment of the Requirements for the Degree of Master of Science in Aquaculture/Aquatic Sciences

Frankfort, Kentucky

June 8, 2012

# ${\tt NUTRITIONAL\ REQUIREMENTS\ OF\ THE\ BLUE\ CATFISH\ (\it Ictalurus\ furcatus)}$

#### Charles E. Brown

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#### **VITA**

Charles E. Brown, son of Frank Lloyd and Ann (Fowler) Scott, was born April 27, 1975 in Selma, Alabama. He graduated from Frankfort High School as Valedictorian in 1993. He attended Lexington Community College in Lexington, Kentucky for two years, then entered the University of Kentucky in September, 1995, and graduated cum laude with a Bachelor of Science degree in Biology in August, 1997. After working as a Laboratory Technician II in Kentucky State University's Aquaculture Program for two years, he entered graduate school at Kentucky State University in September, 1999. He married Lucy Lynn, daughter of Dr. Louie and Evanelle Lynn on December 27, 1999.

#### THESIS ABSTRACT

# NUTRITIONAL REQUIREMENTS OF BLUE CATFISH (Ictalurus furcatus) Charles E. Brown

M. S., June 8, 2012
B.S., University of Kentucky, 2010

74 Typed Pages

#### Directed by James H. Tidwell

Juvenile Kentucky-strain blue catfish, *Ictalurus furcatus*, with an average initial weight of 39.0 g, were stocked into 3.5-m³ floating cages at a rate of 250 fish/cage and fed one of three diets. Diets contained either 29, 33, or 38% protein. Fish were fed all they would consume in 40 min for 139 days. There were three replicates per diet. At harvest, there were no significant differences ( $P \ge 0.05$ ) in final individual weight, percentage weight gain, survival, and specific growth rate among treatments and these parameters averaged 127 g, 227%, 97%, and 0.85%/day, respectively. Our study suggests that a non-domesticated strain of blue catfish from Kentucky can be fed a diet with 29% protein when growth in cages. This may allow producers to reduce feed costs and increase profits.

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# (EXAMPLE STYLE PAGE)

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