#### THESIS/DISSERTATION PREPARATION GUIDE

#### Introduction

The Department of Aquaculture and Fisheries Thesis/Dissertation Preparation Guide is intended to assist graduate students organize the results of their research and present these results in the form of a scholarly document. This Preparation Guide will save you heartache, headache, irritation, and delay if you read it thoroughly, follow the directions carefully, and adhere to all standards and requirements. Do not use previous theses/dissertations as a sole model for your thesis/dissertation.

Because the thesis/dissertation is the culmination of a student's s experiences in a graduate degree program, it should reflect a high level of competency. The subject should be current and pertinent to the discipline. The language should be clear and free from jargon. The grammar should be perfect. The style, format, and quality of paper should meet requirements stated in this Preparation Guide. For your convenience, there is a Thesis/Dissertation Checklist that you can use as a reminder of items that need your attention.

If you have any questions, or if you are in any doubt at all, please contact your advisor before you proceed. We prefer that you ask for information before you proceed, rather than have you proceed in error and be required to make what may be costly corrections and/or adjustments later, and perhaps delay completion of your degree.

Once you have completed your thesis/dissertation, there will be a series of reviews and revisions of your work. This period of reviews and revisions is an important part of your scientific training. The review process results in higher-quality scientific work. Reviews make invaluable contributions to theoretical and analytical aspects as well as in the interpretation of results and clarity of writing.

The review process begins with your advisor. Advisors may wish to review portions of your thesis/dissertation or wait until you have a completed draft. Frequent communication with your advisor is essential during this phase. Once your advisor has cleared the thesis/dissertation (often after many revisions), the thesis/dissertation is sent to your advisory committee for further review. When you receive review comments and suggestions from advisory committee members, you will work with them to satisfy their concerns, questions, and changes. When your advisor and each advisory committee member agrees that the thesis/dissertation is defensible, it is time to schedule your thesis/dissertation seminar and oral defense. During your seminar and oral defense, additional issues may arise that result in additional revisions to the thesis/dissertation. These revisions are made following the seminar and oral defense.

### Preparation of the Thesis/Dissertation

The thesis/dissertation should adopt a "chapters" format using double-spaced 12-point Times New Roman font, unless otherwise instructed in this guide. The beginning of the thesis/dissertation should have a blank page followed by the duplication release, cover page, signature page, an abstract, acknowledgements, a table of contents, a list of tables, and a list of figures. Examples of the format of the duplication release, cover page, signature page, table of contents, list of tables, and list of figures are provided on the department's webpage. No page numbers are put on the blank page, duplication release, cover page, or signature page. The cover page is considered the first page of the thesis/dissertation. Hence, the thesis/dissertation abstract starts on page iii. Beginning with the thesis/dissertation abstract and ending with the list of figures, pages should be numbered with Roman numerals (12-point Times New Roman font) centered at the bottom of the page approximately 3/4 inches above the edge of the page (i.e. insert page numbers in the document's footer).

The thesis/dissertation abstract should have the word "ABSTRACT" in all caps centered (not bold) at the top of the first page. Likewise, the acknowledgements should have the word "ACKNOWLEDGEMENTS" centered at the top of the first page. The abstract and acknowledgements should be double-spaced. The table of contents should follow the format of the example provided at the website. The phrase "TABLE OF CONTENTS" should be centered at the top of the page in all caps (not bold). Use an actual Microsoft Word table for the table of contents. The table of contents should be double spaced. We recommend you do not use the Microsoft Table of Contents Tool to make the table of contents or the list of tables or list of figures.

The list of tables and list of figures should follow the format of the examples provided at the website. The phrases "LIST OF TABLES" and "LIST OF FIGURES" should be centered at the top of the respective sections in all caps (not bold). Use a Microsoft Word table for both sections. Tables and figures should be numbered using a two-digit format, where the digit to the left of the decimal represents the chapter and the digit to the right of the decimal represents the number of the table or figure within each chapter (see example of list of tables and list of figures). The tables and figures should be similarly numbered within each chapter. Table descriptions may include the entire table heading or just the first sentence of the table heading but must be consistent throughout the list of tables. Likewise, figure descriptions may be the entire figure caption or just the first sentence of the figure caption but must be consistent throughout the list of figures. Table and figure descriptions should be double spaced (see example of list of tables and list of figures). All these sections should follow the AFS Publication Style Guide to the extent possible.

The first chapter of the thesis/dissertation should be a general introduction to the research with goals and objectives. The first page of the first chapter should include, beginning at the top of the page, the title (e.g. CHAPTER 1. INTRODUCTION: SPLIT-POND SYSTEMS FOR GOLDEN SHINER CULTURE- A FEASIBLE OPTION?) centered and double-spaced in all caps followed by a blank line and then the text. The general introduction will likely have a references section. The word "REFERENCES" should be in all caps (not bold) centered at the top of a page. The references section should be hanging indented and double spaced with no blank line between

individual citations. Try to avoid splitting citations between two pages. Tables and figures may be included in the general introduction and would follow the references section. Page numbering should re-start at page 1 of the first chapter and pages should be numbered with Arabic numerals (12-point Times New Roman font), beginning with the first chapter and running consecutively throughout the balance of the thesis/dissertation. The first chapter should follow the AFS Publication Style Guide and any AFS journal Guide to Authors. One exception to the AFS journal Guide to Authors relates to line numbering. Under no circumstances should any line numbering appear in a thesis/dissertation.

After the introductory first chapter, the research should be divided into chapters, formatted according to the journal to which the manuscript is being submitted. The first page of each chapter should include, beginning at the top of the page, the title

#### CHAPTER 2. EVALUATING NATURAL FOODS IN TRADITIONAL AND SPLIT-POND

SYSTEMS FOR RAISING GOLDEN SHINERS, Notemigonus crysoleucas

centered and double-spaced in all caps (not bold), a blank line, a statement identifying the journal to which the chapter will be submitted

This chapter has been (or will be) submitted to xxxx and is formatted per journal requirements.

centered and single-spaced in italics, a blank line, and the current full citation for the manuscript single-spaced and using the citation style of the manuscript

Spurgeon JJ, Pegg MA, Hamel MJ. 2016. Multi-scale approach to hydrological classification provides insight to flow structure in altered river system. River Research and Applications. DOI: 10.1002/rra.3041.

A blank line should follow the citation. Thereafter, the chapter should follow the formatting requirements of the specified journal. Each chapter would likely include an abstract, introduction, methods, results, discussion, references, tables with headings, and figures with captions. Theses/dissertations chapters should refrain from line numbering even if a journal's guide to authors calls for line numbering.

The thesis/dissertation should have a final chapter containing general conclusions that briefly summarizes the overall findings, as well as stating relevant management recommendations, management implications, and future research needs. The first page of the final chapter should include, beginning at the top of the page, the title (e.g. CHAPTER 5. GENERAL CONCLUSIONS) centered and double-spaced in all caps followed by a blank line and then the text. If references are used in the last chapter, a references section should be included. The references section should be hanging indented and double spaced with no blank line between individual citations. The last chapter should follow the AFS Publication Style Guide and the Guide to Authors for any AFS journal.

Appendices may be included in a thesis/dissertation. These would follow the final chapter. An un-numbered blank page should be inserted after all the text of the thesis/dissertation.

If specific formatting questions are not covered by manuscript preparation instructions, students should follow the style and conventions of Scientific Style and Format: The CSE Manual for Authors, Editors, and Publishers, Eighth Edition.

### Detailed Arrangement of the Thesis/Dissertation

- 1. Fly Leaf (a blank page, no page number)
- 2. Duplication Release (no page number)
- 3. Cover Page (assumed page number i); the cover page should be centered between the 1½-inch left margin and 1-inch right margin. On the cover page, the following information is listed (See example Cover Page):
  - a. The title of the thesis/dissertation (IN ALL CAPS, centered and single spaced)
  - b. "A Thesis" (or Dissertation)
  - c. Submitted in partial fulfillment of the requirements for the degree of Master of Science (or Doctor of Philosophy) in Aquaculture and Fisheries
  - d. The word "by"
  - e. The full name of the author (this must be the name on the official student record) and a listing of previous degree(s) with the name of the institution, city and state, and the year awarded
  - f. The month and year in which the degree sought is to be awarded (contact the Graduate Coordinator for the correct month and year)
  - g. "University of Arkansas at Pine Bluff"
- 4. Signature page with the following information (assumed page number ii):
  - a. "THIS THESIS (or DISSERTATION) IS APPROVED FOR RECOMMENDATION TO THE GRADUATE COUNCIL"
  - b. Spaces for the signatures of the advisor, members of the advisory committee, Graduate Coordinator, and Department Chair; the approval page of all copies of

the thesis must have original signatures. The name of each committee member will be typed directly under each signature.

- 5. ABSTRACT (actual page number iii)
- 6. ACKNOWLEDGEMENTS (Roman numerals for page number)
- 7. TABLE OF CONTENTS with page references (Roman numerals for page number) (See example TABLE OF CONTENTS)
- 8. LIST OF TABLES (complete title and page number) (See example LIST OF TABLES)
- 9. LIST OF FIGURES (complete title and page number) (See example LIST OF FIGURES)
- 10. CHAPTER 1. GENERAL INTRODUCTION (begin Arabic page numbering and continue consecutively through all chapters to end of document)
- 11. REFERENCES for General Introduction (continue Arabic numbering)
- 12. Tables and Figures for General Introduction (continue Arabic numbering)
- 13. Subsequent CHAPTERS (with all sections necessary for submission to specified journals; continue with Arabic numbering)
- 14. CHAPTER \_\_. GENERAL CONCLUSIONS (continue Arabic numbering)
- 15. REFERENCES for General Conclusions (continue Arabic numbering)
- 16. Tables and Figures for General Conclusions (continue Arabic numbering)
- 17. Final fly leaf (a blank page).

### Paper Type:

All theses/dissertations submitted to the Watson Memorial Library must be presented on  $8\frac{1}{2}$  x 11-inch paper in at least twenty (20) pound weight, 25% rag (cotton-content), and acid-free bond. There are no exceptions to this requirement.

#### Font Type:

The font type size must be 12 points and the font must be Times New Roman. Exceptions may be made for:

- Extensive tables, which may use a smaller font type size that is still easily readable
- Formulas, which may use special fonts or italics as required for such elements as mathematical or Greek symbols.
- Subscripts and superscripts, which may be smaller than the text font.
- Footnotes, which may be of a smaller font if used consistently throughout the document.

### Margins:

- All pages of the thesis/dissertation must have the following margins:
  - left: 1½ inches
    right: 1 inch
    top: 1 inch
    bottom: 1 inch
- If a table or figure is rotated to landscape, the margins would be:
  - left: 1 inch
    right: 1 inch
    top: 1½ inches
    bottom: 1 inch
- Text must be left-justified
- All paragraphs must be indented and this spacing must be consistent throughout the document, unless otherwise specified by specific journal formatting instructions.
- The only exceptions to the margin requirements are for tables and figures, which may be smaller and centered, thus leaving larger margins.
- Within the exceptions noted above, all tables and figures, including their titles, must conform to margin requirements. Tables and figures may be photographically reduced to meet margin requirements.
- It is not permissible to leave a single line of a paragraph or other subdivision (widow or orphan) at either the bottom or the top of a page.

### Pagination:

The initial blank page and duplication release page are not numbered. The cover page and signature page are not numbered but are allowed for in the numbering sequence. Therefore, the abstract page immediately following the signature page will be numbered 'iii' (lower case Roman numerals) and numbering will continue with lower case Roman numerals until the first page of the first chapter. Page numbering must be bottom-centered ¾ inch from the bottom of the page. All pages including chapter title pages, section-dividing pages, appendices, etc. and continuing to the final page, must be consecutively numbered with Arabic numerals (i.e., 1, 2, 3, etc.). The final blank page is not numbered.

# Spacing:

The thesis/dissertation should be double-spaced, unless specified otherwise in this guide or specified by journal formatting requirements. Quotations and equations should be single-spaced and indented.

## <u>Tables and Figures:</u>

- Tables and figures must be numbered with Arabic numerals using a two-digit format, where the digit to the left of the decimal represents the chapter and the digit to the right of the decimal represents the number of the table or figure within each chapter.
- Table titles are placed two lines above the top line of the table.
- Figure titles are placed two lines below the last line or bottom of the illustration.
- Table and figure titles may be single spaced in the text.
- A table that will not fit on one page may be continued onto subsequent pages with the appropriate notation placed two lines above the continuation of the table [e.g., Table 1. (continued)].
- The bottom of a table or figure usually appears at the bottom of the page on which it is printed. When size or format require horizontal placement, the bottom appears at the outer (or right) edge of the paper, with the table or figure facing away from the left margin.
- Tables and figures appear after the "References" sections. Tables and figures of one-half page or less in length may appear on the same page with the text, separated from the text above and below by triple spacing. A table or figure longer than one-half page should be placed on a separate sheet following the page where it is first referenced.
- Tables and figures that are presented in a landscape orientation should have a 1.5-inch margin along the top, and 1-inch margins on the right, left, and bottom. Page numbers should appear 3/4 inch from the left edge of the page, centered top to bottom, and be rotated 90 degrees so they read correctly when the landscape figure or table is bound. No page number should appear on what will be the right side of a bound landscape page.
- Two or more tables or figures may be grouped together on a single page.
- Color should be used only when absolutely necessary.

• Original questionnaires, letters, maps, data sheets, and similar materials to be included in appendices must conform to margin and page numbering specifications.

# Use of Copyrighted Material:

When any copyrighted material is used extensively, that is, more than 150 words in a direct quotation, the student must conform to all laws pertaining to the use of copyrighted material. This information is in the Reference section of the library.

### **Computer-Generated Images:**

Color or black and white computer-generated images are acceptable in a thesis/dissertation and must be printed on the required cotton paper.

### ExtraLarge Pages:

Extra-large charts, maps, etc., should be folded in a form ready for binding.

#### Non-Print Materials:

These materials include slides, cassettes, compact discs, etc. The student must submit a set with each thesis/dissertation. Slides must be submitted in covered boxes. Appropriate covers should be provided by the student to protect any cassettes and compact discs that are submitted, and each item should be clearly identified with the student's name and the name or title of the item.

## Patents:

Defenses of theses/dissertations that contain information relevant to possible patent applications shall be held in the usual manner with the exception that those portions of the documents which deal specifically with the patent related information will be presented and discussed only after the meeting has been closed to all persons except the candidate and the specifically assigned members of the advisory committee. The meeting will be re-opened when discussion moves to other portions of the work.

Theses containing information relevant to possible patent applications will be made available only to the members of the advisory committee. After the work has been successfully defended, copies will be deposited in the University Library but under special conditions of limited access, i.e., listed in the library catalog but not placed on the shelf, and will be available for access only with the express permission of the department. Such documents will remain in this restricted status until the patents have been applied for, at which time, specific authorization for their release will be given by the Chair of the department.

### **Duplication:**

Theses and dissertations presented for deposit in the Watson Memorial Library may be machine duplicated/reproduced provided that appropriate methods are used, and high standards of quality are maintained. If a thesis/dissertation is duplicated or reproduced, you must check that all copies are clear and readable, and the pages are in the proper placement. The original typed copy must be clear, black, and neat so that it will yield a very clean, distinct contrast between paper and type.

## Approval:

When the advisor, each advisory committee member, the graduate coordinator, and the department chair approve of the final version, six copies of the thesis/dissertation are printed. Original signatures are obtained from the advisor, all advisory committee members, the graduate coordinator, and the department chair on each of the six signature pages.

# Binding:

Do not bind the thesis/dissertation in any manner. Six copies of the thesis/dissertation must be submitted in loose-leaf form along with a single PDF file of the document. The Watson Memorial Library will be responsible for binding.

#### Submission of Thesis/Dissertation:

The six unbound copies of the thesis/dissertation must meet all specified paper and duplication requirements, all format standards, and must not be punched or bound in any way. You should submit your thesis/dissertation in a covered box. The six copies along with a PDF file of the entire document are to be presented to the Watson Memorial Library. Only then is the thesis/dissertation requirement fulfilled. A student uses the "Notification to Registrar of the Thesis/Dissertation Completion" (Form #11) to document that all steps of the thesis/dissertation requirement have been fulfilled. The Thesis Completion Form should be submitted to the graduate coordinator two weeks prior to graduation to ensure that your name is included in the program for the annual commencement ceremonies in May and December. Approval deadlines do not exist for summer semesters. During these semesters the degree award date is variable and is based upon the submission date of the final thesis/dissertation, submission of the Thesis/Dissertation Completion Form, and processing by Academic Records.

#### Recommended Time Line

# **During Semester Prior To Semester of Graduation**

- Petition to graduate with registrar
- Complete data collection and all analyses
- First draft of complete thesis/dissertation to advisor for critical reviews (time can vary depending on the quality of the first draft)

### Final Semester

- Thesis/dissertation to advisory committee members for critical reviews (time varies depending on reviewer's comments; suggest allowing at least two months)
- Thesis/dissertation approved for seminar and oral defense by all advisory committee members (prior to seminar and oral defense announcement)
- Seminar and oral defense announcement (one week prior to actual defense)
- Thesis/dissertation seminar and oral defense
- Final thesis/dissertation corrections (time varies but can take a month or more)
- Signatures of advisor, all advisory committee members, graduate coordinator, and department chair on six copies of the completed thesis/dissertation
- Copies of thesis/dissertation and electronic copy (PDF file) to Watson Memorial Library
- Notification (using Form #11) to Graduate Coordinator/Registrar of thesis/dissertation completion (two weeks prior to graduation to ensure your name is included in the program for commencement ceremonies)