Graduate Program Guidelines
Aquaculture and Fisheries Sciences

Department of Aquaculture and Fisheries
School of Agriculture, Fisheries and Human Sciences
University of Arkansas at Pine Bluff

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The policies and guidelines listed in this handbook require continuing evaluation, review and approval by the department and the university administration. The procedures in this handbook reflect the policies at the time of printing and the department and the university reserve the right to change the policies at any time without prior notice. It is the responsibility of each student to become familiar with these guidelines and to become aware of changes as they occur.

I. OVERVIEW OF AQUACULTURE/FISHERIES CENTER

The Aquaculture/Fisheries Center at the University of Arkansas at Pine Bluff (UAPB) was created in 1988. It combines resident instruction, research and extension responsibilities into one comprehensive unit. Currently, the Center has a total of 34 faculty and staff including 14 Ph.D. scientists, 10 M.S., 4 B.S.-level staff and 7 secretarial and maintenance personnel.

The research component of the Aquaculture/Fisheries Center is supported by a 107-earthen pond facility that also includes a 40-pool unit. The 5,400 sq. ft. hatchery houses holding, spawning, and experimental tanks along with a small recirculating culture system. Additional buildings provide storage areas for feed, chemicals, tools and seines. The S. J. Parker Agricultural Research Center building provides laboratory space that includes a 1,300 sq. ft. wet laboratory for aquarium studies, a water quality laboratory, and a 1,000 sq. ft. nutrition laboratory. The 1890 Extension building houses the state-of-the-art fish health diagnostics laboratory that is fully equipped to conduct microbiological, viral, and histopathological analyses of fish. The Aquaculture Equipment Development Building provides facilities for research and development of aquaculture equipment. The Hatchery Research and Development Building was completed in 2005 for hatchery fish and water quality research. It is divided into two dry labs and two wet labs that can be combined or separated with independent temperature/light control to manipulate spawning throughout the year. A high tunnel greenhouse and outdoor shed area have recently been constructed for research on aquaponics and biofloc technology, rean792 n cannBT/F3 12 Tf1su1 0 00.01 5c

6. Official GRE scores (UAPB code = 6004).
7.

IV. ADMISSION REQUIREMENTS AND STUDENT CLASSIFICATION

No student will be admitted under any condition unless a faculty member agrees to serve as the advisor. advisor declines to with the appropriate graduate faculty status agrees to assume advisory responsibilities for the student, the student will be dismissed from the program. During the application process, the applicant indicates a preferred area of specialization that is referred to the appropriate faculty member for review. This requirement ensures that adequate research facilities and funding will be available upon original research.

A. **M.S. Admissions requirements include the following**:

1. B.S. degree in a natural sciences field from an accredited institution of higher education.
2. A score of at least 291 on the GRE (Quantitative & Verbal) with a grade point average during the Junior and Senior years of 3.5 or better, or a score of at least 297 on the GRE with a grade point average during the Junior and Senior years of 3.0 or better.
3. Minimum TOEFL (iBT) score of 79 or IELTS score of 6.5 (for International students).
4. Agreement of a graduate faculty member in the Department of Aquaculture and Fisheries to supervise the student and fund their original research.

Regular Admission

To be admitted as a regular student, applicants must have earned a baccalaureate degree in a natural science field from an accredited institution and have scored 79 or above on the TOEFL (iBT) or 6.5 on IELTS (for international students, if applicable). Applicants must have scored at least 291 on the GRE (Quantitative & Verbal) with a grade point average during the Junior and Senior years of 3.5 or better, or have2 reW*nBTubt lea

B. Ph.D. Admissions requirements include the following:

1. M.S. degree from an accredited institution of higher education in an aquaculture, fisheries, agriculture, natural resources, or related scientific discipline.
2. Minimum GPA during the M.S. studies of 3.0 on a 4-point scale.
3. Minimum GRE of 297 (combined verbal and quantitative).
4. Minimum TOEFL (iBT) score of 79 or IELTS score of 6.5 (for International students). International applicants who hold degrees or diplomas in a related subject from post-secondary institutions in English-speaking countries (e.g., the United States, Canada, England, Ireland, Australia, or New Zealand) or who have successfully completed at least a two-year post-secondary course of study in which English was the language of instruction are not required to submit TOEFL or IELTS scores.
5. Agreement of a graduate faculty member in the Department of Aquaculture and Fisheries to supervise the student and fund the original research.

The program will provide graduate students a strong academic foundation and advanced training in aquaculture/fisheries at the highest level of quality and fully integrated with research ranging from aquaculture to field-based fisheries studies so that graduates are prepared for distinguished careers in academia, industry, or public service.

Regular Admission

To be admitted as a regular student, applicants must have earned a Master of Science degree in a natural science field from an accredited institution and have an Official TOEFL (iBT) score of 79 or higher, or IELTS score of 6.5 or higher (international students, if applicable). Applicants must have scored at least 297 on the GRE (quantitative & verbal) with a grade point average during their Master of Science studies of 3.0 or better.

V. TUITION AND FEES (effective Fall 2018 Summer 2019)

Tuition
In-state tuition is $207 per credit hour and out-of-state tuition is $469 per credit hour. Graduate students on assistantships are charged in-state tuition. Students are responsible for all fees.

Fees

Athletic Fee	$22.00/c0. 269.5

credit is awarded). Students seeking to audit a graduate course must obtain permission from the course instructor.

X. ADVISORY COMMITTEE

Each student must satisfactorily pass a series of milestones throughout their program of study leading to the graduate degree. These milestones have been developed to ensure that students have a clearly defined path to follow and understand the direction needed for steady progress towards their degree. However, the program also includes mechanisms that allow students to adapt to changing circumstances that arise throughout many research projects, to change research projects, and to change advisors. The first milestone is establishment of an advisory committee.

A. M.S. Advisory Committee

submit a CV or resume and receive approval from the advisor, graduate coordinator, and the department chair before serving on an advisory committee. Switching advisors is allowed with permission of the current advisor, the prospective advisor, the graduate coordinator, and the department chair (Form 05). Changes in a committee member (Form 06) must be approved by

artment chair. All

original forms must be filed with the graduate coordinator. Copies will be forwarded to the

XI. PROGRAM OF STUDY

The second milestone is creation of a unique program of study. Specific courses to be taken by each student will be specified in a program of study approved by the advisor and the advisory committee. This program of study will ensure that the student possesses the expected knowledge base prior to standing for the comprehensive or preliminary examinations. We expect students who enroll in the program to bring varied backgrounds and levels of preparation in aquaculture and fisheries; thus, the committee will assist the student to tailor an appropriate program of study.

The program of study must be finalized by the end of the first full semester of graduate course work in a committee meeting (Form 07). This meeting should be arranged by the student and attended by the advisor, all committee members, and the graduate coordinator and/or the department chair. Conference call arrangements should be made for committee members unable to attend the meeting. The advisory committee, the graduate coordinator, and the department chair must sign programs of study, indicating their approval.

A. M.S. Program of Study

The M.S. program of study includes courses to be taken by semester over the typical 2.5-year period of enrollment. Coursework must include a minimum of 34 credit hours. At least 26 credit hours must be core courses, including Research Methods and Scientific Writing, and one graduate level course in statistics. In addition to the 26 credit hours of core courses, two credit hours of Graduate Seminar are required.
One credit hour of Graduate Seminar must be taken in the first full semester of study. Failure to complete the requirement of establishment of an advisory committee and creation of a program of study by the end of the first full

Changes in the program of study (Form 0
committee, the graduate coordinator, and the department chair. All original forms must be filed

the graduate coordinator.

B. Ph.D. Program of Study

The Ph.D. program of study should include a minimum of 42 credit hours beyond the M.S. degree. Each student must complete a minimum of 24 hours of core coursework in the Department of Aquaculture and Fisheries. Within this minimum requirement, a one credit hour graduate-level ethics course will be required and up to 8 additional hours of appropriate external coursework may be substituted, with the approval of the advisory committee, graduate coordinator, and department chair. A Memorandum of Agreement has been signed with the Graduate School of the UAMS to allow

Ph.D. students from UAPB to enroll in graduate-level courses that add depth to the aquaculture/fisheries coursework offered at UAPB. In addition to the 24 hours of core coursework, students will also take two hours of Graduate Seminar, at least one hour of a teaching/extension practicum, Research and Dissertation credit hours, and possibly additional advanced coursework in biological, chemical, and social sciences. One credit hour of Graduate Seminar must be taken in the first full semester of study. Failure to complete the requirement of establishment of an advisory committee and creation of a program of study by the end of the first full

Changes in the program of study (Form 0
committee, the graduate coordinator, and the department chair. All original forms must be filed with the gr

GAQF 5323 Aquaculture Marketing 3 Credits (3 hrs. Lecture)

GAQF 5420 Fish Physiology 4 Credits (3 hrs. Lecture, 2 hrs. Lab)
This course will impart an understanding of the organization of diverse physiological systems. The course begins with energy mobilization and systems responsible for the maintenance of homeostasis; followed by integration of and response to environmental signals through sensory biology and the neuroendocrine systems; and concludes with applications of fish physiology to fisheries management and aquaculture. Offered fall semester of odd years.
Prerequisites: None.

GAQF 5445 Stream Ecology 4 Credits (3 hrs. Lecture, 3 hrs. Lab)
Students will learn about the chemical, physical and biotic factors that affect stream organisms and will also learn how aquatic ecosystems function. Stream organisms have developed adaptations to cope with such systems. Stream habitat management, impact assessment, and habitat modeling will be emphasized. Hydrologic data interpretation will be integrated into field exercises. This course is recommended to acquire an understanding of stream hydrology and dynamics and is necessary for students who embark on careers with regulatory or management functions. Offered fall semester of odd years.
Prerequisites: None

GAQF 5440 Aquatic Chemistry and Analysis 4 Credits (3 hrs. Lecture, 3 hrs. Lab)
The physical, chemical, biological, and hydrological characteristics of surface water systems will be reviewed. Specific attention will be given to procedures that evaluate interactions among water, soils, and biota that provides

2. If the dispute is not resolved in step one, the student should request a meeting with the chairperson of the department offering the course. The instructor of the course will also attend this meeting.

XIX. COMPREHENSIVE AND PRELIMINARY EXAMINATIONS

A. M.S. Comprehensive Examinations

M.S. students must pass a comprehensive examination prior to defense of their thesis. The

and synthesize information. The examination will include written and oral components. The

examination. The format
each committee member to determine the exam format and content to prepare properly.

The comprehensive examination must be successfully completed no later than the semester prior to the semester a student wishes to graduate. Passing the comprehensive examination requires a unanimous committee vote. Students who do not successfully complete the comprehensive examination on their first attempt will be notified in writing by their advisor and may be required to conduct more course work or independent study prior to attempting the exam a second time. Students who fail the comprehensive examination twice will be dismissed from the program. Notification of successful completion of the comprehensive examination must be made known to the department and to the registrar by the committee (Form 09).

B. Ph.D. Preliminary Examinations

When the Ph.D. student completes his/her core coursework, he/she will schedule his/her preliminary examinations. The student must pass his/her preliminary examinations at least one year prior to graduating. The preliminary examination tence and ability to think critically and synthesize information. Students should meet with each required to conduct more coursework or independent study prior to attempting the preliminary

The first chapter of the thesis/dissertation should be a general introduction to the research with goals and objectives and a literature cited section for the general introduction. Pages should be the signature page. After receiving the proofread thesis/dissertation with completed signature page, the advisor notifies the graduate coordinator that the thesis/dissertation requirement has been fulfilled (Form # 11) and provides a copy of the cover and signed signature page. **Notification that the thesis/dissertation is complete must be made two weeks prior to commencement to be included in the program**. Six copies of the proofread thesis/dissertation must be printed on proper bond paper (25% cotton), copied as a PDF file, and submitted to the Aquaculture/Fisheries Research and Education Library technician for their signature (Form 11). Watson Memorial Library will ensure that the paper is the correct bond, ensure that photographs are glued properly, and submit the six copies to the binder. One bound copy is for the student, one copy is for the advisor, two copies are for the library, and two copies are for the department. The cost for reproduction is the responsibility of the student. The cost for binding is the responsibility of the library.

XXV. EXIT INTERVIEW FORM

Prior to graduation, graduating students must fill out and submit an exit interview (Form 16). The form is available online under the graduate program link at the AQFI webpage and should be submitted to the Graduate Coordinator.

XXVI. REGISTRATION STATUS OF STUDENTS

Students should always be enrolled, i.e., be registered until graduation. When a student completes all requirements of credit hours for coursework, Research and Thesis/Dissertation, and

3. One copy of transcripts from all schools attended since the student was enrolled in the Aquaculture/Fisheries graduate program.
4. GRE scores (if scores are more than five years old)

List of Forms for the graduate degree programs found online at www.uapb.edu/academics/school_of_agriculture_fisheries_and_human_sciences/aquaculture_fisheries/graduate/grad-forms.aspx or at other web pages as indicated.

Form	Content
00	Application for admission to UAPB Graduate School (onlineapp.uapb.edu/Account/Login?ReturnUrl=%2f)
01	Application for admission to Aquaculture/Fisheries Graduate Program (www.uapb.edu/sites/www/Uploads/AQFI/Grad/GR-FORM-01-AQFI_Grad_App.pdf)
02	Letter of recommendation (www.uapb.edu/sites/www/Uploads/AQFI/Grad/GR-FORM-02-Rec_Letter.pdf)
03	Approval of credit transfer
04	Formation of graduate advisory committee
05	Change of advisor
06	Change of graduate committee
07	Declaration of program of study
08	