Department of Animal & Food Science

Martin-Gatton College of Agriculture, Food and Environment

Updated: **June, 2024**

Graduate Student Handbook

The information in this handbook is intended to assist *prospective and current* graduate students in the Department of Animal and Food Sciences at the University of Kentucky in the pursuit of their graduate programs and during the application process. It should be used as a supplement to the materials published in The Graduate School Bulletin and is subject to change in accordance with changes in policies of The Graduate School, Gillis Building, University of Kentucky, http://gradschool.uky.edu/

Graduate study in Animal & Food Science is an individualized process. This handbook does not contain a rigid set of guidelines that apply to all students in all situations. Never-the-less, students are responsible for meeting all university program requirements. Graduate students are expected to consult with their mentors, graduate committee and the Director of Graduate Studies on issues for which guidelines are not explicit.

General Information

The degrees of Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) are available in both Animal Science and Food Science. Programs (M.S. and Ph.D.) in Animal and Food Sciences are divided into disciplinary areas of animal nutrition, nutritional physiology, physiology of reproduction and management. Special interests in beef cattle, swine, poultry, sheep, and horses may be pursued within many of these disciplines. Programs in Food Science offer specialization in dairy technology, food chemistry, food microbiology, food safety, meat biochemistry and meat processing.

Students interested in Graduate Study in the Department of Animal and Food Sciences are encouraged to consult the list of Graduate Faculty to identify faculty members with research in their areas of interest. There are approximately 25 faculty members in the Department of Animal and Food Sciences who can serve as major advisors for graduate students. ***Students are admitted to the graduate program in the Department of Animal and Food Sciences only after being selected by an individual faculty member who chooses their students to mentor. Students are rarely admitted without first contacting or being contacted by a faculty member.*** There are approximately 20-30 regularly enrolled graduate students in the Department at any one time. Most major advisors mentor 1 or 2 graduate students at a time, but some will have 3 or 4 graduate students in their program. The Graduate Student body is very diverse and includes men and women from across the U.S. and a number of countries.

Graduates of the M.S. and Ph.D. programs in Animal and Food Sciences find employment in many areas. Students completing the Ph.D. degree are employed by businesses in animal agriculture and food science as well as by universities. Many graduates pursue careers that involve research or teaching at a university. Because of their strong research training, Ph.D. graduates often work with the Cooperative Extension Service or other organizations to assist in the transfer of technology and application of research results to the animal and food industries. Many recent M.S. graduates are employed by agribusiness companies in technical service, product development or research roles. A number of M.S. graduates are currently teaching at 2, and 4-year colleges and others are

employed as research assistants at universities. Finally, a significant number of M.S. graduates work with youth and 4-H, and adults through the Cooperative Extension Service. Approximately 50% of the students receiving M.S. degrees go on for additional education.

The Director of Graduate Studies

Within each department at the University of Kentucky, there is a faculty member that serves as the Director of Graduate Studies (DGS). The DGS provides information to prospective students, coordinates the application process, and works with the graduate school to make sure that current students and faculty are aware of all new rules or requirements. The DGS chairs the Graduate Activities Committee which meets several times a year to review graduate policies in the Department of Animal and Food Sciences and review fellowship candidates. The DGS does not "accept" graduate students. **The DGS acts on requests by faculty for students they have "chosen" to work with them. It is imperative that students who are seeking admission work through faculty in their area of interest.**

All prospective graduate students are encouraged to contact the DGS directly during the application process and to schedule a personal visit if possible. The DGS can help prospective students identify potential advisors. **All current students must provide the DGS with contact information (email, phone, office number and local address) to facilitate the flow of information related to deadlines and requirements**. Please see Mr. Kevin Hagan in 903 W.P. Garrigus to fill out an information form. The Director of Graduate Studies for the Department of Animal and Food Sciences is: Dr. David L. Harmon, 814 WP Garrigus, University of Kentucky, Lexington KY 40546**,** 859-257-7516; email: david.harmon@uky.edu

Admission Information

The University of Kentucky is committed to a policy of providing educational opportunities to all qualified students regardless of economic or social status, and will not discriminate on the basis of race, color, religion, sex, marital status, age, national origin or physical or mental disability. Students should indicate whether they are domestic (US) or international students in order to receive the correct application forms.

To be considered for admission to the graduate program in the Department of Animal and Food Sciences, students must:

- Be in the process of completing, or have already completed, a 4-year degree (B.S., B.A. or equivalent) from an accredited institution of higher learning.
- Applicants for a Ph.D. program must be in the process of completing, or have already completed, an M.S. degree or equivalent.
- Have a minimum grade point average of 3.00/4.00 (where an "A" =4) in undergraduate course work and 3.0/4.0 in any graduate course work.
- International applicants must complete the TOEFL (if required; paper 550, Internet, 79; 213 computer based; IELTS 6.5)
- Must take GRE general examination — no score minimum
- Applicants must have completed these courses;
    - Required courses: 1 semester calculus or physics, 3 semesters biology/physiology, 3 semesters chemistry (including 1 semester of organic chemistry or biochemistry).
- Additional courses in physiology, cell biology, microbiology, and anatomy are encouraged

- Applicants must complete all the application forms required by the Graduate School and the Department of Animal and Food Sciences

Graduate School On-Line Application

- Completed on-line Graduate School application form
- Payment of application fee
- Transcripts are uploaded during the application process
- GRE scores are uploaded
- TOEFL scores are uploaded (international only)

The online application is available through the grad school website:
https://gradschool.uky.edu/apply
The Graduate School
University of Kentucky
Gillis Building
Lexington, KY 40506-0027

Official GRE scores - These scores should be sent directly from Educational Testing Service (ETS). The Institution Code for UK Graduate School is R1837.

Official TOEFL or IELTS scores - All applicants whose native language is not English are required to submit one of these scores directly from the testing service. The minimum acceptable TOEFL score is 550 (paper-based) 213 (computer-based) or 79 (internet-based). The minimum IELTS score is 6.5. Submitted scores must be no more than two years old.

Students must submit all application materials including transcripts, letters of reference, application forms and GRE scores before an admission decision will be made. Students should carefully follow all instructions on the application materials provided. Submission of complete application materials is the responsibility of the student and students should carefully read all materials to determine what should be submitted to the Graduate School and what should be submitted directly to the Department of Animal and Food Sciences. To **maximize** chances for admission in the Fall semester with funding, students should complete the application process for the Department of Animal and Food Sciences by **January 15**. For Spring admission all materials should be submitted by **May 15**.

Graduate School Application Deadlines are:

Domestic students: All materials received one month prior to the semester you wish to enroll.

International students: **Fall Semester Deadline: April 15**
Spring Semester Deadline: September 15

Admission to the M.S. and Ph.D. degree programs in the Animal Science and Food Science areas is selective and competitive. Most students entering Graduate Programs in the Department of Animal and Food Sciences have academic credentials far above the minimum requirements. Selection criteria vary by discipline area with any or all of the following being important: grade point average, GRE score, references, the strength of previous academic program (coursework), evidence of research experience, etc. Some faculty may require students to come for an interview, or they may conduct a phone or Zoom interview. All prospective students are encouraged to visit the University of Kentucky. During a visit, prospective students can meet with potential advisors, the Director of Graduate Studies and current students. Prospective students should contact the Department of Animal and Food Sciences at least 2 weeks prior to their anticipated visit to make

arrangements with specific faculty members and the Director of Graduate Studies.

Graduate students in the Department of Animal and Food Sciences come from a variety of undergraduate programs, including Animal Science, Food Science, Biology, and General Agriculture. Typically, successful applicants have completed a strong science-based program. Occasionally, students with strong academic records are not admitted to the Graduate Program in the Department of Animal and Food Sciences because all graduate student positions are already filled. The graduate school automatically sends rejection letters to all non-admitted applicants at the end of each semester. However, the Graduate School and the department both maintain your application, and you may be considered for admission in subsequent semesters. It is best if you contact the Graduate School and the department to request that your application is considered for the following semester (or whatever semester you wish to be considered).

Under unusual circumstances, a student that does not meet the minimum admission requirements may be admitted on a provisional basis. Students that do not meet minimum admission requirements should consult with the Director of Graduate Studies for the Department of Animal and Food Sciences or a faculty member in their area of interest as to the best course of action.

Because most programs are somewhat individualized, neither the M.S. nor the Ph.D. programs have a specific beginning or ending dates. Most students begin graduate programs at the start of the Fall semester, but students occasionally begin their programs in the Spring semester (January to May) or Summer (May to August). The expected period for completion of an M.S. degree is about 2-2.5 years (including summer session). The expected period for completion of a Ph.D. degree is 3-4 years (including summer session). Although graduate programs do not begin or end on a specific schedule, the time frame is not open-ended. The Graduate School Bulletin describes the specific time limits for each degree.

Departmental Philosophy and Expectations Concerning Graduate Education in Animal and Food Sciences

Graduate programs are very different from undergraduate programs in the Department of Animal and Food Sciences. Undergraduate programs rely primarily on completion of a group of required and elective courses. Graduate programs include coursework requirements, but coursework is only one facet of a graduate program. The primary focus of a graduate program in the Department of Animal and Food Sciences is the generation of novel and publishable research results. The level of self-motivation, dedication, and responsibility required for success in a graduate program is much greater than what is required in an undergraduate program. Graduate study in the Department of Animal and Food Sciences requires a large individual commitment but offers an outstanding opportunity for personal and professional development. Every experience is different, but graduate students frequently report that their graduate program has enhanced their confidence and ability to work independently, improved their time management and organizational skills, and increased their subject matter expertise.

The research component of a graduate program emphasizes skills in critical thinking, experimental design, and scientific writing. Although it is common for students to assist with a variety of research studies during the course of their program, every student must conduct their own project(s), then write and defend a comprehensive thesis describing that research. Graduate students work closely with their graduate advisor to design and implement an appropriate research project, then organize and publish the results. Most students will present their research at regional or national meetings in their area of expertise. The goal of the Graduate Program in the Department of Animal and Food

Sciences is to develop animal and food science specialists who are able to succeed in a variety of sophisticated academic, industrial and professional settings. Thus, as part of their professional development, graduate students are encouraged to participate in all missions of the Department of Animal and Food Sciences, including teaching and extension. All students pursuing a Ph.D. are encouraged by the Department of Animal and Food Sciences to participate in a meaningful teaching or extension activity. Throughout their graduate career, students are encouraged to interact with other students and faculty within and outside of their area of interest.

Graduate students are expected to take an active role in the implementation of their research projects. The Department of Animal and Food Sciences has extensive research facilities on campus and at the research farms with excellent technical support staff. However, graduate students are commonly responsible for sample collection, sample analysis, assay development (especially Ph.D. candidates), maintenance of cell cultures or microbial cultures and daily care of their research animals. Animal research is frequently time-sensitive; that is, certain measurements can only be made when animals are in a particular physiological state (at calving or foaling, during estrus, during lactation, at weaning, etc.) and these physiological states commonly occur at the convenience of the animal, not the researcher. Furthermore, animals require daily care, at a minimum, and constant monitoring during some types of experiments. Consequently, research projects in all disciplines require work on weekends, nights and holidays.

A graduate program in Animal and Food Sciences is a full-time commitment. Most students will spend about a third of their time in class or studying, and the remainder in research-related activities. During intensive research studies, it is not uncommon for graduate students to work more than 60 hours per week. Although graduate students assist with some teaching and extension activities, the time commitment is variable (usually less than 5 hours per week). Students should expect the distribution of their time to change during the course of their graduate program. Particularly in Ph.D. programs, coursework is concentrated in the first few semesters so the student can devote more time to research and writing of their dissertation towards the end of their program.

The Department of Animal and Food Sciences at the University of Kentucky is dedicated to ensuring that every student makes choices that are best suited to his/her educational and professional development. The decision to pursue a graduate degree should be made only after deliberate consideration of every aspect of the program. Before applying to a graduate program in the Department of Animal and Food Sciences, we encourage every student to ask themselves three important questions:

> “Am I committed to Animal or Food Science as a career choice?”
>
> “Am I willing to make the personal commitment in time and effort that will be needed to successfully complete a graduate program?”
>
> “Is a graduate program at the University of Kentucky the best one for me?”

The Collaborative Graduate Education at UK: Guidelines for Students, Faculty, and Programs[a]

The success of every graduate student at the University of Kentucky depends in part upon the student's advisors and supervisors who oversee and guide the student's training as a teacher and/or researcher, and on the program in which they study and research. Whether they work together in a lab or a research team, share duties in an undergraduate classroom, or consult periodically in office hours or online, the faculty member and student together establish a plan for the graduate student's research and/or teaching, work to identify and remove obstacles to success, and ensure that the student has opportunities to gain professional experience. An effective and productive relationship should be based upon shared expectations, as laid out in the following guidelines that are clearly communicated in an atmosphere of trust and courtesy.

Faculty Supervisors and Advisors should:

- be supportive, equitable, accessible, encouraging, and respectful, promoting an environment that is free from harassment, discrimination, and other inappropriate behavior;
- be sensitive to the power imbalance in the student–advisor relationship;
- set clear expectations and goals for students regarding their academic performance, research activities and progress;
- discuss expectations, and university policies, for teaching assistants or research assistants, including work hours, vacation time, and health contingencies;
- establish mutually agreed upon expectations for frequency and format of communication, providing students with regular, clear feedback on performance and progress;
- promote and manage productive and collaborative relationships for students working in large research groups and collaborations;
- provide students with training and oversight in all relevant aspects of research, including the design of research projects, the development of necessary skills, and the use of rigorous research techniques or procedures; provide and discuss policies regarding the management of research materials and data;
- provide and discuss clear criteria for authorship at the beginning of all collaborative projects and revisit authorship throughout, as contributions may change;
- foster a safe work environment by discussing and mitigating any potential hazards associated with a student's research activities;
- encourage participation in professional meetings and assist in securing funding for such activities;
- ensure students receive training in the skills needed for a successful career in their discipline, including oral and written communication and grant preparation as appropriate;
- recognize that many students will pursue careers outside of academia and/or outside their research discipline, and assist them, from early in their degree, in achieving their chosen career goals.

Graduate Students should:

- recognize that they bear the primary responsibility for the successful completion of their degree;
- complete all tasks assigned by the department/program in connection with a stipend, including teaching, grading, research, and other assistantship responsibilities;

- know the policies governing graduate studies in the department and the graduate school and take responsibility for meeting program and graduate school deadlines;
- know and understand University policies and procedures regarding research data/material ownership, sharing, and transfer;
- be proactive, respectful, and timely in communicating with their advisor and mentors about progress and challenges associated with research and program trajectory;
- clearly communicate with their advisor(s) regarding their career preferences and any changes to their goals during the course of their program;
- be proactive about improving research skills, including written and oral presentation;
- be proactive about teaching professionalization and preparation through exploring workshops and training opportunities, appropriate professional service opportunities, and career planning support;
- participate actively in departmental activities such as seminars, colloquia, brown-bags, reading groups, professional development workshops, graduate student association, etc.;
- seek mentoring and support resources beyond their faculty advisor(s), including other faculty members and peers as well as individuals external to the university;
- seek assistance, support, and advice when personal factors such as health and family impact progress toward degree or performance of duties;
- inform faculty advisors of potential and/or existing conflicts with fellow students, staff, or other faculty, and work toward their resolution, following departmental guidelines;
- be aware that if they feel compelled to change advisors or research direction, they have options and should consult with their advisor, other mentors, or department officers, recognizing that such options may include changing programs.

Departments and Programs:

- provide students with up-to-date information on policies, practices, resources, degree requirements, and expectations for progress;
- assist students with selection of their advisors as needed, ensuring that all students have a faculty member with responsibility for advising them;
- proactively monitor graduate student progress toward their degrees and professional development, including appropriate course enrollment, mentoring meetings, committee meetings, exam completions, and other benchmarks toward the degree. Opportunities should be provided to examine the effectiveness of the student-advisor relationship.
- provide students and faculty with contacts, resources, and a clear process for potential conflict resolution (e.g., ombudsperson, director of graduate studies, or chair);
- promote an environment that is free from harassment, discrimination, and other forms of inappropriate conduct that could result in a hostile work environment;
- provide students and faculty with information, resources, and contacts related to the reporting of any misconduct, harassment, discrimination, or other inappropriate conduct;
- counsel students who wish to change advisors or research groups; assist them as necessary in identifying new advisors within the department or program; and advise the student on options should no placement be found;
- provide opportunities for professional development that will be relevant to students seeking careers outside academia and/or their research discipline;
- direct students to campus resources that promote health and wellness;
- incorporate these guidelines and recommendations into their departmental policies or handbooks and actively promote their observance.

Types of Financial Support

A graduate program is a full-time commitment, and most graduate students in the Department of Animal and Food Sciences receive some type of financial support. The University of Kentucky offers a small number of fellowships through the Graduate School. A fellowship is a non-service award made to superior students to assist in the pursuit of an advanced degree. Some fellowships are very restricted in terms of eligibility, and all are very competitive. In order to be considered for most Fall Semester Fellowship opportunities, all admission materials (application, transcripts, references, GRE scores) must be received by the Department of Animal and Food Sciences by January 15.

Unlike many departments at the University of Kentucky, the Department of Animal and Food Sciences offers few Teaching Assistantships for graduate students. Instead, graduate students may be eligible for Research Assistantships. The Graduate School defines an assistantship as an appointment to specified teaching or research duties. A Research Assistantship offers a modest stipend (currently $22,540) that is intended to assist the student in meeting financial obligations during the graduate program. An assistantship is not a scholarship and students are expected to participate in the missions of the Department in exchange for this funding. In general, students receiving a half-time assistantship should expect to devote at least 20 hours a week to activities associated with research, extension or teaching, which may or may not be related to their thesis or dissertation. These activities may include (but are not limited to): general laboratory work, animal care, data collection, statistical analysis, library research not associated with course-work, assisting with classes or laboratories, grading exams or quizzes, and helping with 4-H or Extension activities. Typically, students will find that their activities will vary from week to week. Students that receive financial support from the Department of Animal and Food Sciences must complete payroll forms. These forms are available through the Office of the Chair of the Department of Animal and Food Sciences (Room 908).

Graduate students must be in good academic standing (GPA 3.0) and maintain 9-12 hours per semester in order to receive an assistantship. Some assistantships may be associated with a specific activity or project and thus may be available for a limited period. Continuation of support is always contingent on academic performance as stated in the Graduate Student Academic Staff Notice of Appointment (GSAS) student contract, and acceptable programmatic progress in regard to research and other responsibilities associated with completion of a student's degree.

All graduate research assistants receive paid tuition.
A couple of points:

- Any semester your cumulative (at least 9 hours) GPA falls below 3.0 you become responsible for tuition until it increases to 3.0
    - If you are a non-resident, you must pay non-resident tuition during this time
- **Students are responsible for tuition if they need to enroll in the summer**
- Graduate School will no longer pay charges for withdrawal or drop below full time for funded students

Students can be accepted into the graduate program with or without financial support. The amount and source of financial support vary from program to program. Some financial support may be tied to a specific research project, and the amount of support will be determined by the project. Typically, graduate students admitted with support will receive a letter from their major professor detailing the amount of funding they will receive.

Some students may be accepted into the Graduate Program in the Department of Animal and Food Sciences without a promise of financial support. Students accepted without financial support are

considered to be "self-supporting." Students that do not receive support from the Graduate School or the Department of Animal and Food Sciences are not relieved of responsibility in regard to research, teaching or Extension activities. These activities are considered an essential component of graduate education regardless of an individual's financial situation.

Tuition and Fees

Kentucky residents (those not receiving a fellowship or assistantship) currently pay $7,165/semester in tuition and fees. Non-Kentucky residents (US and international) pay approximately $17,730/semester. **All** full-time graduate students are charged student fees (a mandatory health and recreation fee of approximately $681.50 per semester). These fees entitle the student to use the Student Health Service (https://ukhealthcare.uky.edu/university-health-service/student-health) and some of the athletic and recreational facilities at the University of Kentucky. The student health fee is separate from Student Health Insurance. These fees are provided for supported students.

All graduate research assistants, fellowship recipients, and teaching assistants are provided with health insurance at no cost to the student (see: https://uky.myahpcare.com). Non-funded graduate students may be eligible to purchase health insurance. International students that are funded through assistantships or fellowships will receive health insurance at no cost (as described above). Non-funded international students are required to purchase health insurance.

Degree Requirements:

Master of Science (*M.S.*)

The Master of Science (*M.S.*) degree in Animal and Food Sciences requires:

Plan A – Thesis option

- at least 30 credit hours of coursework with at least 2/3 of the coursework in regular classes (not a special project, independent study, etc.). Six h CAN be met with 6 hours of ASC 768 (graded S/UN). Additional coursework may be substituted for ASC 768 to meet the necessary 30 h. If choosing to add 6 hours of 768 it is recommended that students add 2 hours each semester on top of traditional course load to avoid additional semesters of coursework.
- at least 12 hours must be at the 600 or 700 level (excluding thesis credit)
- at least one-half of the minimum course requirements (excluding thesis, practicum, or internship credit) must be in the major or core area (ASC)
- a minimum 3.0-grade point average for all coursework
- Successful completion of ASC 771 sections 1 and 2 (Animal Science Seminars)
- Successful completion of a final exam*
- Submission of an approved thesis** to the Graduate School

* The final exam includes the presentation of the thesis research and is scheduled after the thesis is complete. At least one month prior to the expected exam date, the student should consult with the Director of Graduate Studies regarding procedures for scheduling the exam through the Graduate School. All requests for exams must be completed at least 2 weeks before the exam date. In most cases, the complete thesis must be provided to the committee at least 2 weeks prior to the final exam. Exams may not be scheduled within the 8-day period preceding the end of a semester or during periods when classes are not in session. The final exam follows an oral presentation of the thesis research and is conducted by a committee of at least three faculty members. Typically the student's advisor chairs the committee. Students should consult with their advisor regarding the selection of committee members and the scheduling of the exam.

Students must file an **Application for Degree** (on-line through graduate school website) in the Graduate School within 30 days after the start of the semester (15 days into 8-week summer semester) in which the student wishes to graduate. These are good for one year.
** Under unusual circumstances the Department of Animal and Food Sciences may agree to waive the requirement for a thesis by substituting additional coursework or other requirements. This requires a total of **36 course hours (Plan B option)**.

Doctor of Philosophy *(Ph.D.)*

According to the Graduate School, the Ph.D. degree represents "documentation of independent and comprehensive scholarship in a specific field. Such scholarship must be manifested by both the student's mastery of subject matter and capacity to do research." Therefore, the requirements and expectations for completion of a Ph.D. are greater than those associated with an M.S. degree.

The Ph.D. degree in Animal and Food Sciences requires:

- Students must complete 36 credit hours of graduate coursework* within five years of entry into the doctoral program.
- An awarded master's degree from the University of Kentucky or from another accredited school may satisfy 18 of this 36-hour pre-qualifying requirement.

ASC 757: Qualifying Examination Residency Credit

757 is not a required course. Students must have completed all qualifying examination coursework requirements to be eligible to enroll in 757. Students will register for 2 credit hours of 757 and this will be recognized as full-time enrollment.

- This course will be graded S/UN and will NOT be repeatable.
- If the QE is not taken an I grade should be assigned.
- If the QE is not passed a UN grade should be assigned. Enrollment in **up to** 9 credit hours of alternative coursework will be required in subsequent semester(s) until the QE is passed. At that point an S grade may be assigned to 757 to resolve an I grade; a UN grade will however stand.
- Students will not be able to register for 767 until the QE is passed.

All Ph.D. students are required to enroll in 2 credit hour of **ASC 767**, Dissertation Residency Credit after they have completed their qualifying exam. **Students will remain continuously enrolled** in this course every fall and spring semester until they have completed and defended the dissertation. This will constitute full-time enrollment. Students are required to complete a minimum of two semesters of 767 before they can graduate.

Requirements for Ph.D.

- Successful completion of ASC 771 sections 1 and 2 (Animal Science Seminars) as part of 36 credit hours completed
- A minimum 3.0-grade point average on all coursework
- Successful completion of the Qualifying Exam**
- Successful completion and defense of the Ph.D. dissertation***
- Submission of the approved dissertation to the Graduate School and payment of dissertation

fees

* During the student's first or second semester, they should consult with their advisor concerning the selection of an Advisory Committee (minimum of 4 members: advisor is chair, and one member must be outside the department). The Advisory Committee serves to assist the student in the selection of courses, the design of experiments, development of techniques and preparation of the dissertation. The Advisory Committee also administers the Qualifying Exam and the Final Exam.

**The Qualifying Exam determines that the student has sufficient mastery of the subject matter in their field. The Qualifying Exam is scheduled after completion of coursework. The Qualifying Exam must be scheduled through the Graduate School at least 2 weeks prior to the beginning of the exam. The format of the Qualifying Exam is determined by the Advisory Committee and may have written and oral components.

***The Final Exam includes defense of the dissertation and any other components determined to be appropriate by the Advisory Committee. The "Notification of Intent" form must be submitted to the Graduate School at least eight weeks before the exam is to be scheduled. Upon submission of the form, the Graduate School appoints an Outside Examiner. Following the appointment of the Outside Examiner, the final examination date may be set by submitting the "Request for Final Examination" at least two weeks before the scheduled date for the Final Exam.

The Dissertation Approval Form, along with an acceptable copy of the dissertation must be presented to the graduate school at the time the exam is scheduled. It is intended that the Advisory Committee should have the opportunity to make suggestions to the dissertation in the period between its distribution and the scheduling of the exam. The final exam must take place during a regular semester/summer session and may not be scheduled in the last 8 days before the end of a semester/session. The final exam is a public event. Students should note that there is a compulsory minimum period between when the Qualifying Exam is passed and when the Final Exam may be scheduled (see Residency Requirements on the previous page).

Graduate Courses and Course Loads

The only course required of all students is ASC 771 (Animal and Food Sciences Seminar). All students are required to take other classes, but the selection of the courses and the order in which they are completed will vary with the student's program. For M.S. students, classes are selected in consultation with the student's advisor. For Ph.D. students, classes are selected in consultation with the advisor and the Advisory Committee. A full course load for a graduate student is considered to be 9 credit hours per semester (fall or spring). **However, unless you are required to be enrolled full time, e.g., to meet visa requirements or for student loans, you can take less than 9 hours and students are encouraged to do this whenever possible.** The Department of Animal and Food Sciences offers a variety of graduate-level courses. Graduate students in Animal and Food Sciences and Food Science also take courses offered by many other departments including (but not limited to): Agronomy, Biochemistry, Statistics, Clinical Nutrition, and Biology. Graduate students may receive graduate credit for Animal Science (ASC) or Food Science (FSC) courses listed at the 500, 600 or 700 level. They may also receive graduate credit for some 400-level courses offered by other departments. Graduate students only receive credit for courses completed with a grade of "C" or better. Students that do not maintain a 3.0-grade point average are subject to academic probation and dismissal.

University and Departmental Resources Available to Graduate Students

The Department of Animal and Food Sciences maintains a wide variety of Research Facilities. These facilities are also used for teaching activities. The Beef, Sheep, and Swine Research Units are located at the Animal Research Center in Woodford County. The Poultry and Dairy units are located in Fayette County on Coldstream Farm. The Horse Unit is on Maine Chance Farm in Fayette County. All of these animal units are within 30 min. driving distance from campus. The Garrigus Building houses all of the laboratory facilities for the Department of Animal and Food Sciences as well as a Meat Processing Facility and several animal research rooms. Additional facilities are located at the Princeton station.

The University of Kentucky has excellent library and literature searching capabilities for students and faculty. Most students use resources located in the W. T. Young Library, the Agricultural Learning Center or the College of Medicine Library, which is all located within an easy walking distance from the Department of Animal and Food Sciences.

Within the Department of Animal and Food Sciences, graduate students are expected to share offices, but each graduate student will have their own desk. Graduate students will be issued keys for their office and the Garrigus Building. They may also be issued keys to other areas (laboratories, animal units) as necessary.

Many graduate students travel to regional and national scientific meetings in conjunction with their graduate program. When students are giving presentations at scientific meetings, support for travel may be available through the Graduate School or through the Department of Animal and Food Sciences. Graduate students should work closely with their advisor in making travel plans related to their graduate program. The University of Kentucky requires that all out of state and international travel be approved in advance. In addition, there are some restrictions on graduate student drivers of University-owned vehicles under certain conditions.

Animal and Food Sciences Graduate Association

All graduate students are encouraged to join the Animal and Food Sciences Graduate Association. The purpose of the association is 1) to provide opportunities for graduate students to meet, interact, and learn about research within the department, 2) to provide opportunities for professional development, 3) to organize social gatherings for graduate interaction and discussion, and 4) to help new graduate students discover opportunities at the University of Kentucky. To join or for more information, contact the faculty advisor: Dr. Kristine Urschel, 612 WP Garrigus, Lexington KY 40546, 859-257-7748, klurschel@uky.edu.

Travel: Travel support is up to the policy of the individual major professor. Make sure you discuss this and clearly understand the policy and expectations prior to planning for official travel. Some partial support of travel expenses may be available through the department depending on fund availability.

Any official travel requires:

- Submission of Travel Request prior to travel
- Receipts for all expenses with the exception of meals
- Submission of Travel Voucher upon completion of travel

Guidelines for Academic Progress in Animal & Food Sciences Graduate Programs

Prior to July 1 of each year, all students will provide an **Annual Report of Progress** to the DGS. The progress report will consist of a list of milestones achieved, advisor evaluation, and narrative statements. The progress report must be reviewed and signed by the research advisor and student. Failure to turn in the progress report has consequences for departmental support and graduate school funding in that a contract for the new fiscal year will not be submitted until completed.

M.S.

1. The student has made good academic progress. At the end of the first year, the student has completed two semesters with appropriate course load and achieved a ≥ 3.0 GPA.
2. Formed supervisory committee.
3. Outlined program of study.

Ph.D.

First-year

1. The student has made good academic progress. At the end of the first year, the student has completed two semesters with appropriate course load and achieved a ≥ 3.0 GPA.
2. Formed supervisory committee.
3. Outlined program of study.

Second-year

1. The student has continued good academic progress. At the end of the second year, the student has completed coursework requirements and achieved a ≥ 3.0 GPA.
2. Met with supervisory committee and presented research proposal.
3. Scheduled qualifying examination.

Third-year

1. Passed qualifying examination.
2. Actively engaged in research.
3. Met with the supervisory committee.

Fourth-year

1. Met with the supervisory committee.
2. Scheduled final examination.

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Annual Review of Graduate Student Progress

Name: _____ Date of review: _____

Degree: PhD ☐ MS (thesis) ☐ MS (Plan B - non-thesis) ☐

Research area/thesis /dissertation title:_____

_____

Major advisor: _____

Date of start of program: _____

Date of most recent committee meeting: _____

Summary of progress in course work:

_____

_____

Summary of progress in research:

_____

_____

_____

Recommendations:

GPA: Last semester _____ Cumulative _____

Attach Current CV

Signatures

STUDENT _____

MAJOR ADVISOR _____

DGS: _____

Animal and Food Sciences Student Checklist (Masters)

- □ Enroll in the semester for which you were accepted.
  - Must be enrolled **EVERY** Fall and Spring semester until completed
- □ Establish a course curriculum with your advisor.
- □ Outline and conduct research.
  - **Notify DGS** when you qualify for "ASC 748 zero hours" (after course requirements are complete) to save tuition
- □ Determine an examining committee.
- □ Complete your thesis.
- □ The semester you intend to graduate do the following:

Application for degree: _____ (Date Submitted)

http://myuk.uky.edu/ Click on: Student Services / myRecords / Graduate Degree Application
Due 30 days after the beginning of the semester (15 days for 2nd summer session). Please see https://www.uky.edu/registrar/content/academic-calendar for specific deadlines.

At least 2 weeks prior to examination, submit this form:

Request for Final Master's Examination: _____ (Date Submitted)

https://ris.uky.edu/cfdocs/gs/MastersCommittee/Student/Selection_Screen.cfm

(The Thesis Approval form is incorporated into the above online form)

Conduct a review of your transcript to insure you don't have any missing grades; I grades and your GPA is 3.00 or higher. Graduate School policy will not allow you to sit for the exam if you have unresolved academic issues.

The final examination must take place no later than eight days prior to the last day of classes of the semester in which the student expects to graduate. Final examinations may not be scheduled during the period between semesters or between the end of the eight-week summer session and the beginning of the fall semester. Consult the Academic Calendar (https://www.uky.edu/registrar/content/academic-calendar) for deadlines for the scheduling of final examinations.

Thesis:
You have 60 days following the date of your defense to submit your final, accepted document to the Graduate School. You will not have the entire 60 days if you defend late in the semester and need to graduate that semester (check https://www.uky.edu/registrar/content/academic-calendar for submission deadlines). Prior to final submission you must have your thesis reviewed by the Graduate School for a first format check. This process takes about 48 hours but may take longer during peak periods, especially during the end of the semester. Please plan accordingly.

Animal Sciences Student Checklist (PhD)

- ☐ Enroll in the semester for which you were accepted.
  - Must be enrolled **EVERY** Fall and Spring semester until you complete your degree (continuous 2 hours of ASC 767 after qualifying exam)
- ☐ During your first year at as Ph.D. student:
  - **Formation of advisory committee** _____ (Date Submitted)
  - **http://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection_Screen.cfm**
  - The advisory committee has a core of four members. This core consists of the major professor as chair, two other members from the major area, and at least one representative from any minor area(s). At least one representative must be from outside the academic program (department). All members of the core must be members of the Graduate Faculty of the University of Kentucky and three (including the major professor) must possess full Graduate Faculty status.
- ☐ At least two weeks prior to qualifying exam date:
  - **Qualifying Examination Request** _____ (Date Submitted)
  - **http://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection_Screen.cfm**
  - Students must have the equivalent of 2 years of residency (36 hours)
  - Conduct a review of your transcript to insure you don't have any missing grades; I grades and your GPA is 3.00 or higher. Graduate School policy will not allow you to sit if you have unresolved academic issues.
  - After passing the qualifying exam, students must maintain continuous enrollment **(2 hours of ASC 767)** until dissertation is successfully defended.
- ☐ The semester you intend to graduate:
  - **Application for degree:** _____ (Date Submitted)
  - http://myuk.uky.edu/ Click on: Student Services / myRecords / Graduate Degree Application
  - Due 30 days after the beginning of the semester (15 days for 2nd summer session). Please see https://www.uky.edu/registrar/content/academic-calendar for specific deadlines. You must resubmit the application for degree the following semester if you do not graduate.
- ☐ At least eight weeks prior to expected final exam date:
  - **Notification of Intent**: _____ (Date Submitted)
  - **http://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection_Screen.cfm**
  - Once submitted, the graduate school will appoint an outside examiner. There must be a two week window given in order to find an appropriate outside examiner. Assigning the outside examiner typically takes 4-5 weeks and you will receive an email when an outside examiner has been found.
- ☐ At least 2 weeks prior to examination:
  - **Request for Final Doctoral Examination**: _____ (Date Submitted)
  - **http://ris.uky.edu/cfdocs/gs/DoctoralCommittee/Selection_Screen.cfm**
  - **Dissertation Approval form (no longer required by the Graduate School)**
- ☐ **Dissertation:** You have 60 days following the date of your defense to submit your final, accepted document to the Graduate School. You will not have the entire 60 days if you defend late in the semester and need to graduate that semester (check https://www.uky.edu/registrar/content/academic-calendar for submission deadlines). Prior to final submission you must have your dissertation reviewed by the Graduate School for a first format check. This process takes about 48 hours but may take longer during peak periods, especially during the end of the semester. Please plan accordingly.

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FREQUENTLY ASKED QUESTIONS ABOUT GRADUATE STUDY:

What programs are offered?

Both the M.S. and Ph.D. degrees in Animal Science are offered. To be eligible for admission to a Ph.D. program, a student must already have an M.S. degree or equivalent. Students may concentrate in the areas of animal nutrition, reproductive physiology, microbiology, food science, digestive physiology and animal management. The Department of Animal Science maintains horses, sheep, poultry, beef cattle, dairy cattle, dogs, and swine for research purposes.

How do I apply?

Students interested in applying to the Graduate Program in the Department of Animal and Food Sciences may contact Dr. David L. Harmon, Director of Graduate Studies, Department of Animal and Food Sciences, 814 WP Garrigus, University of Kentucky, Lexington KY 40546**,** 859-257-7516 (or 257-7508); email: david.harmon@uky.edu for application information.

Students should identify their primary areas of interest when they apply. In the Department of Animal and Food Sciences, students are accepted by specific faculty members who serve as the student's advisor throughout their program. To find out which faculty advise students in your area of interest, consult the list of Faculty Interests via https://afs.ca.uky.edu/directory/faculty

What careers are available after graduation?

Graduates of the M.S. and Ph.D. programs in Animal and Food Sciences find employment in many areas. Many graduates pursue careers that involve research or teaching at a college or university. Some graduates work with the Cooperative Extension Service or other organizations to assist in the transfer of technology and application of research results to the animal and food industries. Graduates are also employed by agribusiness companies in technical service, product development or research roles. Approximately 50% of the students receiving M.S. degrees go on for additional education.

How much does it cost?

All graduate research assistants and fellowship recipients receive paid tuition. Kentucky residents not receiving financial support currently pay approximately $7,165/semester tuition and approximately $682 in fees. Non-Kentucky residents (US and international) pay approximately $17,730/semester tuition and the same fees.

Is it difficult to get into graduate school?

Admission to the M.S. and Ph.D. degree programs in the Animal Science and Food Science areas is selective and highly competitive. Most students entering Graduate Programs in the Department of Animal and Food Sciences have academic credentials far above the minimum requirements. **Your opportunity is greatly enhanced by contacting faculty in your area of interest!**

If I don't get into Veterinary School, what is the deadline for applying to graduate school?

The official admission deadline to be considered for the fall semester is in July. However, most admission decisions are made much earlier than that. To maximize chances for admission in the Fall semester, students should complete the application process for the Department of Animal and Food Sciences by January 15. Students applying after January 15 may not be admitted to the Graduate Program in the Department of Animal and Food Sciences because all open positions for new graduate students have already been filled.

What courses will I be required to take?

Because each graduate program is somewhat individualized, course selection is made in consultation with your advisor, or in the case of a Ph.D. student, with the Advisory Committee. All students are required to take ASC 771: Animal Science Seminar. Graduate credit is given for classes at the 600 and 700 level in Animal and Food Sciences and for some classes at the 400-level that are offered by other departments. The Department of Animal and Food Sciences offers a wide variety of graduate courses. A full course load for most graduate students is 9 hours with 12 hours being the maximum.

Can I complete my degree by taking a few classes at a time?

Coursework is actually a fairly small portion of a graduate program. The primary focus of a graduate program in the Department of Animal and Food Sciences is the generation of novel and publishable research results. Graduate students are expected to take an active role in the design and implementation of their research and to write a thesis describing their studies. Graduate students are also expected to have a high level of interaction with other students and faculty and to participate in all of the missions of the Department of Animal and Food Sciences including teaching and extension activities. In general, graduate study is a full-time commitment.

Is a graduate program in Animal and Food Sciences right for me?

Before applying to a graduate program in the Department of Animal and Food Sciences, we encourage every student to ask themselves three important questions:

a. "Am I committed to Animal or Food Science as a career choice?"
b. "Am I willing to make the personal commitment in time and effort that will be needed to successfully complete a graduate program?"
c. "Is a graduate program at the University of Kentucky the best one for me?"

If you can comfortably answer "Yes!" to these questions, then we encourage you to apply!

Is there any way I can prepare myself for graduate study?

In a recent survey, current graduate students indicated that the best preparation for graduate school included: taking science-based courses, participating in activities that developed self-reliance and time management skills and getting some research experience as an undergraduate.