

As the research progresses and changes are required in the proposed research activities, it is recommended that additional meetings or discussions be held with the student's committee. It is important that Ph.D. students develop and demonstrate abilities to independently design and conduct original research.

Dissertation development – The dissertation will be a formal document that describes the research justification, background, methods, results, and conclusions. It is important that the quality of the information be suitable for publication.

There are different styles acceptable for developing the dissertation. The format will be determined by the student's major advisor prior to beginning the first draft. General University requirements for the dissertation format are described in "Guide for Preparing Theses and Dissertations" located on this website link:

<https://graduate-and-international.uark.edu/resources/forms/thesis-dissertation-guide.pdf>.

The student's major advisor will assist with editing the dissertation. Additional assistance in editing and revision may be obtained from others skilled in scientific writing and members of the student's committee. Copies of the dissertation should be distributed to the student's committee when it is determined by the major advisor to be suitable for the defense.

The student should initiate the dissertation formatting pre-check process with the Graduate School prior to the defense by emailing the dissertation to the Graduate School at gradtad@uark.edu. Refer to "Guide for Preparing Theses and Dissertations" referenced above for instructions regarding the dissertation format pre-check process with the Graduate School.

Dissertation defense (Final examination) – The dissertation defense/final examination should be completed at least four weeks prior to the end of the semester to ensure ample time for any necessary corrections to the dissertation before the submission deadline for graduation. The dissertation should be presented to the student's committee members at least two weeks prior to the scheduled defense. The Ph.D. candidate is responsible for arranging the date, time, and location of the defense with the committee members. Students may reserve one of the conference rooms in the FDSC building for their defense by contacting the Administrative Specialist for assistance. Once the defense date is set, the student should notify Academic Programs Support who will then confirm the online degree audit accurately depicting completion of coursework. Documentation of satisfaction of completed coursework in the online degree audit is required before the degree can be awarded. At least two weeks prior to the defense, the online Dissertation Defense Announcement (<https://graduate-and-international.uark.edu/graduate/current-students/dissertation-defense-form.php>) must be completed and Department Head should be notified about the location and schedule of the defense.

The defense will focus on the dissertation and related topics. Students should also be prepared to address questions related to courses completed for their degree program.

The student's committee will reach a verdict of pass, recess or fail. A majority vote for pass with no more than one vote of fail is required for the pass verdict. The pass verdict may be conditional with the requirement of including specified changes in the dissertation that will be verified by the Dissertation Director and other committee members. If two committee members do not approve to pass, then the committee will re-vote to determine if the recess verdict is appropriate. To obtain the recess verdict, a majority vote is required. The decision to recess will require the student to revise the dissertation, include more research and/or study on certain topics for re-examination at another time. The fail verdict will result in the student being dismissed from the program without the Ph.D. degree.

Completion and distribution of dissertation – Following a pass verdict by the student's committee, the

dissertation will usually need revision to include corrections and changes. Once all corrections have been made to the dissertation, it has received final approval from all committee members, and it has received formatting approval by the Graduate School, the dissertation is ready for submission. Required items for the Dissertation Submission Packet and instructions for submitting the final dissertation are in "Guide for Preparing Theses and Dissertations" located on the Graduate School website (<https://graduate-and-international.uark.edu/resources/forms/thesis-dissertation-guide.pdf>).

The student should provide one bound copy of the dissertation to his/her major advisor, and the student should have a copy for his/her own records. The student also needs to email a PDF copy of the final dissertation to the Administrative Specialist and bring a printed copy (on plain copy paper) to the FDSC office (N-201).

Publications – The dissertation research findings should be presented at professional meetings and published as refereed journal articles in scientific journals. The manuscript(s) for publication must be approved by the student's major advisor, co-author of the manuscript. The student should have at least the first draft of the manuscript(s) written to the satisfaction of his/her major advisor prior to scheduling the final oral examination.

Timeline/Important Deadlines

Please refer to the following guide for information and deadlines for completing the Ph.D. degree.

Appointment of Dissertation Director/Major Advisor	By end of 1 st semester
Selection of Dissertation/Advisory Committee and Submission of Doctoral Committee Form	By end of 2 nd year
Submission of Thesis/Dissertation Title Form	By end of 2 nd year
Completion of coursework	With M.S. degree – by end of 2 nd year Without M.S. degree – by end of 4 th year
Completion of candidacy exams and submission of Candidacy Exam Notification Form	With M.S. degree – 2 ½ years from admission/1 year before defense Without M.S. degree – 4 ½ years from admission/1 year before defense
Deadline to apply for graduation	October 1 for Fall, March 1 for Spring, July 1 for Summer
Dissertation formatting pre-check process	Prior to defense
Schedule defense date and reserve room for defense	At least 2 weeks prior to defense
Submit announcement of defense	At least 2 weeks prior to defense
Send dissertation to committee	At least 2 weeks prior to defense
Notification of scheduled defense from major advisor to Graduate School, Department Head and student's committee	At least 2 weeks prior to defense
Dissertation defense/final examination	At least 4 weeks prior to end of the semester
Dissertation submission deadline	Last day of classes for semester of graduation
Expected degree completion timeline	For students with food science focus: With M.S. – 3-4 years Without M.S. – 4-5 years For students with nutrition focus: With M.S. – 4-5 years Without M.S. – 5-6 years

GENERAL DEPARTMENTAL POLICIES

Building Maintenance and Security

The Department of Food Science building and administrative offices are open Monday through Friday, 8:00 a.m. to 5:00 p.m. Students will need to obtain keys for the building and appropriate work areas if they will be working in the building before 8:00 a.m., after 5:00 p.m., or during weekends and holidays. The Administrative Specialist in the FDSC Main Office (N201) currently organizes the distribution and return of building and room keys.

Key checkout – Keys for the building, labs and offices need to be obtained from the Administrative Specialist in the FDSC Main Office (N-201). Following authorization by the student's major advisor, the graduate student signs and dates a checkout sheet for each key received.

Key check-in – Upon completion of the student's program, all checked out keys must be returned to the Administrative Specialist. Failure to return all keys will result in delayed graduation.

Lost keys – Lost keys must be reported to the main office immediately. This is a serious matter and may involve considerable expense if locks have to be changed. Depending on the circumstances, students may be responsible for paying for the costs involved.

Office Space

Graduate students will be provided a study/office area at a location arranged by the Administrative Specialist and the Department Head. Student desks in E-8 are assigned to students of faculty with labs located in E-wing. Most other students will be assigned a desk in the C-wing (C-1 or C-3).

Office Supplies and Purchasing

Paper for use in department printers is available in the main office. Department printers are to be used for official university research activities only.

Special supplies and research materials should be approved for purchase through the student's major advisor. The Departmental Fiscal Manager organizes the purchase of all research materials and will assist new students through the purchasing process.

Computers and Programs

Computers are available for graduate students to use for their courses and research. Students should check with their major advisor for instructions on which computers are available for their use and on proper use and policies prior to operating a departmental computer. Only legally licensed software is permitted for use on departmental computers. Any questions regarding computer use should be directed to Agritech Research and Education Technology (<https://agritech.uark.edu/>; 479-575-3420).

Computers designated for graduate student use are connected to the AES/UAEX network and may be used by students for their degree studies and research. Non AES/UAEX students have the option to log on with a local account documented at the workstations. Global Protect will be required to access any UA campus resources from N. Campus (farm). Use of the internet through computers in the Department is only allowed for professional work activities and is not allowed for personal activities. All electronic storage devices connected to departmental computers must be scanned for viruses.

Arkansas Food Innovation Center

Use of Arkansas Food Innovation Center (AFIC) is scheduled through John Swenson, AFIC Manager,

afic@uark.edu or 479-575-3095. It is expected that those using AFIC will clean up the facilities after its use. AFIC Manager will provide instructions on proper use of processing equipment and will provide recommendations on processing requirements.

FDSC Departmental Staff Duties Relevant to Graduate Students

There are several personnel in the Food Science Department who are available to assist graduate students while they are pursuing their degree.

Katie Newland, Departmental Administrative Manager – Handles setup of graduate students in the system, the graduate assistant hiring paperwork, and hourly payroll. Contact for Visa issues (H1B, DS2019, J-1, etc.), to report building repairs/needs, to schedule an appointment with Dr. Subbiah, for questions about University policies, to report an injury or safety issue. Maintenance of departmental website and job postings.

Lisa Spurlin, Administrative Specialist III – Graduate student's first point of contact. Makes desk assignments, issues building keys. Contact for reserving classroom/conference rooms and vehicles, for assistance with document fax/scan, mail (FedEx, USP, USPS), photocopy machine jams and paper, printer paper. Assistance with signatures and submission of required forms. Will also help with registration as needed.

Becky Harris, Department Fiscal Manager – Contact for travel related documents (travel authorizations, travel grants from grad school, travel claims), purchasing lab supplies & equipment and/or services (pcards, VWR), processing tuition/fee waivers.

Rosa Buescher, Student Relations/Recruiting – News items for website or newsletter.

Cathy Hamilton, Academic Programs Support – Enrollment assistance (advising hold removal, pre-requisite overrides and instructor consent overrides on FDSC special problems, internship, thesis & dissertation courses, administrative change of registration forms, out of career registrations forms, and ISIS troubleshooting). Information on employment & internship opportunities, events, competitions, scholarship opportunities, academic deadlines, policies/procedures, student services.

Lance Maples, Maintenance Specialist – Building maintenance issues (such as clogged drains in labs, heating/cooling problems, etc).

Nina Reich/David Mitchell – Building janitorial needs (trash removal, bathroom needs, floor maintenance).

Transportation

Bus Service – University Transit bus service extends to the Arkansas Agricultural Research and Extension Center. The bus stop nearest to the Food Science Building is on the corner of Garland and Cassatt. Bus service is available Monday through Saturday throughout the year with schedules available on the UA Transit and Parking web-site (<https://parking.uark.edu/transit-services/transit-operations/maps-and-schedules.php>). Bus schedules should be checked regularly as schedules are subject to change. Students can also download the Passio Go! App which provides real-time interactive bus schedule for all UA Transit routes (<https://uark.passiogo.com/>).

Departmental Vehicles – Food Science departmental vehicles are also available for graduate students. The operation of a state vehicle is permissible for University employees or personnel on official University business only. Departmental vehicles are not allowed for use by students to travel to campus for classes. Students and employees using departmental vehicles must record information as indicated on the vehicle sign-out sheet. To reserve and check out one of the departmental vehicles, contact the Administrative Specialist (N-201).

Travel Reimbursement

The Food Science Department encourages students to participate in professional meetings by presenting scientific reports of their research. Depending on availability of funds, graduate students presenting a paper at a meeting will be eligible for travel expense reimbursement. Plans for travel should first be discussed with the student's Thesis or Dissertation Director well in advance of professional meetings and receive approval by the Department Head.

Travel authorization needs to be established when expenses for lodging and meals are to be claimed for reimbursement. Departmental Fiscal Manager is available to help students through the process of requesting travel authorization and reporting travel expenses through Workday. Request for permission to travel should be turned in at least two weeks prior to the time of traveling.

The Graduate School has a limited number of travel grants that are available for eligible graduate students each year (July 1-June 30). Information about travel grants and the application process is available on the Graduate School website at <https://graduate-and-international.uark.edu/graduate/costs-and-funding/travel-grants.php>.

Departmental policies – Travel for conducting university-related business can be done either in departmental (state owned) or personal vehicles. If the travel is in departmental vehicles, only those individuals who are officially affiliated with the University of Arkansas or are carrying out some form of official business for the University are eligible for travel. If the travel is conducted in a private vehicle, guests may accompany the employee/affiliate, but reimbursement for vehicle expenses then becomes an issue between the student and the Thesis or Dissertation Director; funds for reimbursement will be charged to the student's major advisor's grant accounts.

Only university employees on official business may be reimbursed for travel related expenses such as food and lodging. Students must consult with their major advisor to establish the amount of funding that will be allowed for travel expenses.

Laboratory Safety

All personnel working in laboratories need to know the safety procedures for their lab, including location and proper use of fire extinguishers, showers, and first-aid materials. For safety reasons, a person should not work in a lab alone during hours the Department is closed. All personnel using labs are required to participate in training sessions. Anyone observing unsafe conditions or practices should report them to the Department Head. Kyle McKaughan, Safety Personnel, can also be reached at 575-6475. A safety committee member from each lab has a copy of the campus safety policy that details the University-wide laboratory safety guidelines. The campus safety program is detailed online at <https://enhs.uark.edu/index.php>. The topics of particular importance are The Chemical Hygiene Plan, Blood-Borne Pathogens (Biohazards), Radiation Safety, Respiratory Protection, and Lock-Out Tag-Out. See appendix G for FDSC laboratory safety guidelines.

Laboratory Safety Guidelines

Emergency numbers:

- Emergency: 911
- Campus police: 911
- FDSC Office: (479) 575-4605

Laboratory Do's:

- Know the locations of fire extinguishers, safety showers, and eyewashes and how to use them

- Wear closed shoes that cover your entire feet and protect the top of your foot. Leather or synthetic athletic shoes are recommended. Canvas shoes should be avoided because they absorb chemicals.
- Wear lab coats
- Tie back loose hair
- Wear protective gloves when handling hazardous chemicals. Remove the gloves before leaving the lab or using common equipment or areas, including telephones, refrigerators, etc.
- Use safety glasses at all times, or face shields when handling hazardous chemicals or equipment
- Chemicals should be clearly labeled with the substance name and concentration
- Wash your hands before leaving the lab
- Keep laboratory doors closed at all times
- Lock the lab when not in use
- Dispose of glassware and needles in appropriate containers
- Clean up spills immediately and properly dispose of clean up materials
- Keep the laboratory uncluttered, especially floors, fume hoods and workbenches
- Have material safety data sheets (MSDSs) on file or computer access for all chemicals used in the lab
- Read the MSDSs for the chemicals you use
- Use hoods when handling solvents or toxic chemicals (refer to MSDSs)
- Dispose of chemicals in appropriately labeled containers
- Restrain gas cylinders with individual straps to the wall or bench
- Avoid working in the lab alone
- Report all accidents or injuries immediately to the FDSC main office and your supervisor
- In the case of fire or emergency, call 911
- For information regarding lab or chemical safety access the UofA Chemical Hygiene Plan at: <http://ehs.uark.edu> and click on Lab Safety

Laboratory Don'ts:

- No shorts or loose clothing
- No foods or drinks in the lab
- Do not block safety showers or eyewashes
- Do not obstruct work areas, floors, and exits
- Don't leave source of ignition unattended
- Don't leave experiments unattended
- Do not use equipment unless you are properly trained
- Do not store food in laboratory refrigerators
- In case of an accident, do not refuse to be taken to the hospital emergency. Don't worry, your expenses are covered by the University of Arkansas

If you have questions, ask your immediate supervisor or major professor

Copying

Departmental copiers are available for graduate students to copy material directly related to research. The copiers are not to be used for coursework. Copying books and other copyright material is illegal. For large volume copying, such as multiple volumes of thesis or dissertations, students are asked to use an outside copying service. Departmental copiers require a copy code to operate. The student's major advisor will provide an authorized access copy code number and all copies will be charged to his/her account.

Telephones, FAX and Mail

Personal local phone calls on departmental telephones should be kept to a minimum. All long-distance calls

must be approved by the student's major advisor. Charges are not incurred for long distance calls unless the call is to an international number. A phone list of departmental numbers is available from the Administrative Specialist.

Mail and fax correspondence for business purposes can be made through the Department. All outgoing mail, UPS and FedEx is currently handled by the Administrative Specialist. Mail received for graduate students is organized by the first letter of the last name and is distributed to mailboxes in the upstairs hallway of N-wing. Graduate students are expected to check their mailboxes regularly. A fax machine is located in the FDSC Main Office (N-201).

Food Science Library of Theses/Dissertations

Copies of theses and dissertations from previous graduates are available for faculty, staff, and students to borrow. Print copies are available for checkout and electronic copies are available for years after 2013. To borrow a bound copy or receive an electronic copy of departmental theses and dissertation contact the Administrative Specialist. Copies are also available in Mullins Library or from the faculty.

Preparation for Departure

Program Review and Exit Interview – When a graduate student has completed his/her defense, the student is expected to complete a program review document and schedule an exit interview with the Department Head. Program review document can be obtained by contacting Academic Programs Support when the student has set their defense date. Exit interviews are scheduled with the Department Head with the assistance of the Department Administrative Manager and should be scheduled to take place after successful completion of defense. The Program review document is due prior to the exit interview and can be emailed to Academic Programs Support.

Checkout process – Students contact the Administrative Specialist and Departmental Administrative Manager to initiate the process of termination and check out. The Departmental Administrative Manager will assist with the appropriate termination paperwork. Students must also return any assigned keys and identification cards and provide the Administrative Specialist with a forwarding address. Electronic files that have been stored on departmental computers or Box drive need to be deleted or downloaded in concurrence with the student's major advisor. All data that have been created are University property and need to be deposited with the student's major advisor. Students should also work with their laboratory manager to clean out any research materials associated with their projects that are no longer needed.

FORMS – forms referenced in this document are found on the following pages but can be downloaded from the referenced website url.