

Graduate Handbook

2022-2023

Department of Animal Sciences

116 Clark Hall

Washington State University

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Introduction

This is an exciting time, please let me welcome you to the Department of Animal Sciences (AS) at Washington State University! We offer world-class M.S. and Ph.D. graduate programs that focus on a broad spectrum of areas including basic and applied research. We endeavor to facilitate your career path, enabling you to become one of tomorrow's leaders, scientists and educators, people capable of making valuable contributions in their chosen field.

Animal Sciences provides graduate students opportunities to be mentored by world renowned faculty and obtain in-depth knowledge in their chosen field, to conduct original, innovative cutting-edge research, and to develop critical thinking skills. Furthermore, we provide our students the opportunity to develop a breadth of knowledge across the varied AS disciplines through interactions with colleagues and faculty working in progressive and diverse research areas. Teaching opportunities and training exist in the classroom and in outreach programs. This is a time for much personal growth and personal investment in yourselves. This handbook serves to acquaint students with AS and Graduate School guidelines and regulations. Failure to adhere to these regulations and to observe the degree requirements inevitably result in complications and can confound completion of your degree. Therefore, we highly encourage you to read this document and keep it for further reference. Animal Sciences has a long-standing commitment to financially support our graduate students with funds from Washington State and from various external private and governmental grants. Since the availability of these funds fluctuates from year to year, we cannot guarantee support for all students throughout their entire programs. Nevertheless, our faculty have an outstanding track-record of fully supporting their productive students from the day they start to the day they graduate. Graduate students on formal Teaching Assistant (TA) or Research Assistant (RA) appointment and receiving a stipend are considered full-time "graduate assistants" in the department. These appointments represent a contractual agreement between the student and the department with each party having defined responsibilities. Simultaneous employment, in addition to an assistantship, is not acceptable. Academic responsibilities are defined in this handbook and your advisor and committee define your research responsibilities. Being a graduate student is more than a full-time endeavor and requires your full attention and effort to succeed, at the same time there is a direct relationship between your hard work and your personal rewards. Students generally devote half of their time to class studies and half to their research under the guidance of a major professor. Production of a thesis, and publication of research are expected outcomes of your graduate program and we strive for timely completion of graduate degrees. The AS faculty, staff and fellow students are dedicated to enriching your graduate experience and we wish you every success in your program and in the Animal Science related professions that you will inevitably proceed to.

Gordon K. Murdoch
Professor and Chair
Department of Animal Sciences

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Statement of Ethics

The faculty in Animal Sciences expect our students to develop scientific and professional values. We highly encourage our students to reflect on and consider the following guiding principles:

1. Uphold the highest standards of scientific investigation and professional comportment, and an uncompromising commitment to the advancement of knowledge.
 2. Honor the rights and accomplishments of others and properly credit the work and ideas of others.
 3. Strive to avoid conflicts of interest.
 4. Demonstrate social responsibility in scientific and professional practice, by considering whom our scientific and professional activities benefit, and whom they neglect.
 5. Provide honest and impartial advice on subjects about which they are informed and qualified.
 6. As mentors of the next generation of scientific and professional leaders, strive to instill these ethical standards in our students at all educational levels.
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Faculty and Staff Resources

Department of Animal Sciences

PO Box 646310 / 116 Clark Hall
Pullman, WA 99164-6310
509-335-5523 PHONE / 509-335-1082 FAX

Department Chair:

Dr. Gordon Murdoch, 116 Clark Hall, 335-5523, gordon.murdoch@wsu.edu

The Chair has final approval of all appointments and is the person to contact if a student/advisor or student/faculty conflict arises.

Animal Sciences Graduate Coordinator:

Dr. Min Du, 153 VBR, 335-2744, min.du@wsu.edu; admission and academic requirement questions.

Computer/Technology

Jeremy Heiss	Computing issues	5-6964
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Farm/Facility Managers

Brent McCann	Beef Cattle Operations	5-2280
Dan Snyder	Meats Lab	5-4353
Celina Martiza Matuk Sarinana	Dairy Center	5-1338
Bill Hotchkin	Feed Plant	5-8287
Damon Burke	Farm Services	5-7514

Animal Sciences Graduate Student Association

Callan Lichtenwalter	President	ASLB 118
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Research Staff

Jeanene DeAvila	VBRB 140	5-0675
Jennifer Kiser	ASLB 215	5-6710
Jennifer Michal	ASLB 112	5-1002

Faculty

Name	Office	Phone	Interest
Amber Adams-Progar	ASLB 114	(509) 335-0673	Dairy Management
Min Du	VBRB 153	(509) 335-2744	Animal Growth and Development/Muscle biology
Blake Foraker	Clark 133	(509) 335-4112	Meat Science
Tipton Hudson	Kittitas	(509) 962-7507	Rangeland and Livestock Management
Nancy Irlbeck	Clark 139	(509) 335-9644	Comparative nutrition, companion animal
Zhihua Jiang	VBRB 151	(509) 335-8761	Genomics
Kristen Johnson	ASLB 126	(509) 335-4131	Nutrition/Environment
Paul Kuber	Spokane	(509) 725-4171	Meat Science, Harvest and Fabrication
Nate Law	VBR 131	(509) 335-9817	Reproduction and Stem Cells
Don Llewellyn	ASLB 220	(509) 335-8759	AS Beef Extension
Martin Maquivar	Clark 137	(509) 335-6192	Reproduction/Instructor
Marcos Marcondes	ASLB 120	(509) 335-5059	Dairy Nutrition, Management, Economics
Gordon Murdoch	Clark 119	(509) 335-5523	Physiology of Growth and Metabolism-Beef
Holly Neibergs	ASLB 210	(509) 335-6491	Genomics
Michael Phelps	VBRB 155	(509) 335-2991	Aquaculture, muscle growth, development
Sarah Smith	Moses Lake	(509) 754-2011 ext. 4363	Sheep and Swine Production Science
John Unruh	ASLB 122	(509) 335-4125	Meat Science
Instructors			
Angela Reitmeier	Clark 132	(509) 335-0677	Equine Science
John Swain	Clark 131	(509) 335-5280	Dairy Production

Student Services and Facilities

Academic Success and Career Center

Lighty 160; (509) 335-6000; <https://ascc.wsu.edu/>

Access Center

Washington Building 217; (509) 335-3417; <http://www.drc.wsu.edu/>

Career Services

French Administration Building, Room 139; (509) 335-4521; <https://www.wsujobs.com/>

Child Care

(509) 335-8847; <https://childrenscenter.wsu.edu/>

Compliance and Civil Rights

French Administration 225; (509) 335-8288; <https://ccr.wsu.edu/>

Cougar Health Services

Washington Building; (509) 335-3575; <https://cougarhealth.wsu.edu/>

Cougar Safe Rides

(WSU) 267-SAFE (978-267-7233); <https://cougarsaferides.wsu.edu/>

Division of Student Affairs

French Admin 134; (509) 335-4531; <https://studentaffairs.wsu.edu/>

Employment and Personnel Services

French Administration 139; (509) 335-4521; www.hrs.wsu.edu/

Gender Identity/Expression & Sexual Orientation Center

Compton Union 401; (509) 335-8841; www.thecenter.wsu.edu/

Graduate and Professional Student Association

Compton Union 308; (509) 335-9545; <https://gpsa.wsu.edu/>

Graduate School

French Administration 324; 509-335-1949; <https://gradschool.wsu.edu/>

Hearing and Speech Clinic

WSU Spokane Health Sciences; (509) 828-1323; <https://medicine.wsu.edu/university-hearing-and-speech-clinic/>

Housing and Residence Life

McCartan Office Suite, Streit-Perham Hall; (509) 335-4577; <https://housing.wsu.edu/>

Intensive American Language Center (IALC)

Kruegel Hall 10A; (509) 335-6675; <https://ip.wsu.edu/learn-english/>

International Programs

IP Administration Office, Bryan 301; (509) 335-2541; <http://ip.wsu.edu/>

Multicultural Student Services

Compton Union 4th Floor; (509) 335-7852; <https://www.mss.wsu.edu/>

Office of Research Support and Operations (ORSO)

Lighty 280; 509-335-9661; <https://orso.wsu.edu>

Ombudsman's Office

Wilson-Short Hall 2; (509) 335-1195; <https://ombudsman.wsu.edu/>

Psychology Clinic

Johnson Tower 362; (509) 335-3587; <https://psychologyclinic.wsu.edu/>

Student Legal Services/Housing Commission

Compton Union 305; (509) 335-9539; <https://sls.wsu.edu/>

Transportation Services

Transportation Services Building; (509) 335-PARK; <https://transportation.wsu.edu/>

University Recreation

(509)335-8732; <https://urec.wsu.edu/>

Veterans Affairs

French Administration, Room 345, 509-335-1875; <https://va.wsu.edu/>

Women's Resource Center

Wilson-Short Hall 8; (509) 335-6849; <https://women.wsu.edu/>

Policies and Procedures

Introduction

Graduate students in the Department of Animal Sciences may be working on their degrees full-time or part-time. They may also be funded by foreign or domestic fellowships, teaching or research assistantships, work hourly (time-slip) or pay for graduate school themselves. Some students may also receive stipends for service to other departments and programs at WSU. The Department of Animal Sciences strives to provide an environment for all students to succeed regardless of their personal situation. As you read this manual please note that every attempt has been made to reflect current departmental and university policies and procedures. If a question should arise please ask the Department Chair for clarification and visit the Graduate School website for policy information (<https://gradschool.wsu.edu>).

Fellowships and Foreign Scholarships

See the Graduate School and the granting agency for information regarding these types of awards. In most cases, this support is handled through the Graduate School. Students who have been awarded Fellowships and Foreign Scholarships should see Alaina McCully (Clark 117) when they arrive at WSU for a list of the information needed to begin their support.

Teaching or Research Assistant Appointments:

Graduate assistantships may be grant funded or departmentally funded. Grant-based funding is at the discretion of the faculty mentor's research program and is dependent on funding availability. Departmentally funded assistantships are awarded on a competitive basis, require at least 50% matching funds from grants in the Agricultural Research Center held by the faculty mentor, and include a requirement to assist in teaching undergraduate courses within the department.

Upon arrival in Pullman, students appointed to grant or AS departmental assistantships (TA or RA) should contact Alaina McCully (Clark 117) to complete required forms such as an I-9 and W-4. Be sure to bring your Social Security card and driver's license (or birth certificate). International students will need to present a valid passport and a proper visa; other personal data may be needed to complete the appointment. The University requires that TA's whose native language is not English pass an English proficiency exam prior to beginning their TA duties (<https://ip.wsu.edu/learn-english/teaching-assistant-evaluations/>).

Fall assistantships are from August 15th-December 31st and spring assistantships are from January 1st-May 15th. Your first paycheck will arrive at your home address, if you do not have direct deposit, on September 10th or January 25th.

Assistantships are considered to be taxable income in the state of Washington and Federal tax will be deducted from your paycheck. There is no Washington State income tax. If you are on an assistantship, you will receive tuition and health insurance waivers, but you will be responsible for fees such as service activity and building fees.

The Graduate School usually awards non-resident tuition waivers to domestic students who are on assistantship for two semesters. Graduate students **must reside in the state of Washington** to qualify for any tuition or residency waivers. Residency waivers are not up to departmental discretion, and the Graduate School will only grant out of state tuition waivers to domestic students for two semesters. Once a student has resided in the State of Washington for 12 months, they must apply for residency with the Graduate School. Because of potential changes in residency requirements, students are encouraged to consult with the Graduate School for current policy. (<https://gradschool.wsu.edu/establishing-residency/>).

Graduate students on appointment enter into an agreement with the University that both parties are expected to honor. University policy requires graduate appointees to work 20 hours per week and to be at work each workday during the period of appointment, **including periods when the University is not in session (e.g., Spring and Thanksgiving Break)**, with the exception of legal holidays. Research Assistant responsibilities may include research assigned by the student's advisor as well as thesis or dissertation research. Most teaching assistants should expect to spend up to 20 hours per week on TA duties; class and research work are in addition to the 20 hours. Work schedules must be arranged with the thesis or dissertation advisor and/or TA supervisors. The length of time a student can expect support is outlined in the letter of offer.

RA and TA positions are for nine months. Summer hourly appointments are for one to three months at a rate that is equivalent to the normal RA or TA appointment rate. Vacation time (a total of 2 weeks per year) is negotiable with the student's major advisor. Please note that when you are a TA for a course, you are expected to be present the week before classes start until final grades are submitted. Vacation time should be planned accordingly. Absences during normal work hours must also be arranged with a student's major advisor. Summer support may be available through your advisor. Please consult with your advisor regarding the availability of summer support.

Students who wish to withdraw from their appointment must submit a letter of resignation to the Department Chairman. For details on resignation, contact the Department Chair.

On-campus students on hourly appointments in the department should see Alaina McCully, (Clark 117) and Melissa Whitney (Johnson 205) before the first day of work.

Hourly employment/Time-slip

If you are not on fellowship or assistantship support and your major advisor has hourly wage support funds, see Alaina McCully, (Clark 117) for the paperwork.

Responsible Conduct of Research Training

All graduate students must pass the "Responsible Conduct of Research" training module. We prefer you take this on-line course prior to arriving on campus or immediately thereafter. Go to <https://myresearch.wsu.edu/login.aspx?ReturnUrl=%2fTraining%2fOldAvailableTraining.aspx> for instructions.

Sexual Harassment and Discrimination Prevention.

All students must complete the on-line and Discrimination and Sexual Harassment Prevention training. Go to <https://hrs.wsu.edu/training/discrimination-sexual-harassment-prevention/> to get started. Please print the certificate of completion and turn it in to the main office.

English Proficiency

All international students who will be teaching must complete and pass the English language assessment test given by the Intensive American Language Center. Please go to their website for more information (<https://ip.wsu.edu/learn-english/teaching-assistant-evaluations/>).

Paychecks:

Paychecks are mailed or direct deposited on the 10th and 25th day of the month. Paychecks cannot be forwarded, so make sure that all address changes are dealt with immediately. Address changes can be done through WSU's home page <https://wsu.edu/>. We highly recommend that all TA/RA's sign up for automatic payroll deposit. This can be done at the Payroll Office (room 236 French Administration).

Health Insurance

Students on a graduate student assistantship or fellowship are provided health insurance at no charge. Dependent/Spouse coverage is not automatically provided, but is available for a fee. For complete information regarding coverage, please visit the Health and Wellness Services website at <https://cougarhealth.wsu.edu/studentinsurance/graduate-students/>. Once your assistantship has ended you are not eligible for COBRA. Students not on assistantship can purchase the same insurance as the undergraduate students.

Housing

Arrangements for housing should be made prior to arriving at WSU. University apartment reservations for single students and families may be obtained at Housing Reservations in Streit-Perham. Go to <https://housing.wsu.edu/> to make residence hall reservations. For off-campus housing, you may wish to go to the Chamber of Commerce website, <https://pullmanchamber.com/>, local real estate agencies, or local newspapers (Moscow-Pullman Daily News). You can also visit <http://www.pullman.com/> which has links to rental websites. Recent students have found craigslist to be a valuable source as well.

Keys

To obtain keys for your office, labs, etc., see the office staff in Clark 116. There is no initial charge for the keys, but, in the event that they are lost or you leave the University without returning them a \$30.00 replacement fee per key will be charged, or a bill will be sent to you. If the keys are not returned or replaced, your transcripts will be held by the Registrar's Office. Security is the responsibility of everyone, so please assume responsibility for locking your office and lab doors after regular hours and ensure the building door is locked when you leave outside "building open" hours.

Offices and Desks

The Department of Animal Sciences will provide office space and desks for students as space allows. Contact the Department Chair for a desk and space assignment.

Computing

Students must read and sign the AS Computer Policy (see Appendix). The policy describes appropriate use, inappropriate use, network conductivity, and other important information. For questions see Jeremy Heiss.

Address

Your address for outside mailing will be:

PO Box 646310, XXX Clark Hall or PO Box 646310, XXX ASLB (depending on your office location)
Dept. of Animal Sciences
Washington State University
Pullman, WA 99164-6310

Your campus address for internal mailing is: 6310

Note: personal mail will not be accepted by WSU mail services. There are mailboxes in front of French Administration for the deposit of personal mail.

Staff Assistance

Graduate students may request secretarial assistance only in limited situations. Administrative Assistants will not type personal letters, class reports or similar materials for students. Typing of your thesis or dissertation is considered personal work. You may request assistance with ordering, mailing or shipping packages if they are clearly related to faculty led research or teaching work. The staff may also assist you in meeting room, departmental vehicles and AV equipment reservations if you cannot access the on-line reservation system.

Animal and other Centers

The Beef Center, Dairy Center, Cattle Lab, Meats Laboratory and Feed Mill are among the areas in which you may conduct research or teach. Prior to any animal work, you must have attended the "Animal Awareness Seminar" and have all of your protocols approved by the Institutional Animal Care and Use Committee (IACUC). All scheduling must be done with the appropriate manager ahead of time and all work conducted at the Center is overseen by that manager. For access to the facilities, please contact the manager.

Research Supplies

No student purchases can be made without approval from your advisor. Most research supervisors maintain "blanket" purchase orders at WSU facilities (Central Stores, Chemical Stores, Surplus Stores, Technical Stores, etc.) and service centers (Physical Plant, Technical Services, etc.).

To purchase supplies, an authorization number must be obtained from your supervisor. If unforeseen needs arise in the field, contact your advisor and/or the main office for authorization of an emergency purchase order. You will not receive reimbursement for items purchased from outside vendors without advance authorization.

Departmental vehicles

The department owns several vehicles available for department business. They are only intended to provide transportation to local sites and businesses for authorized university personnel. Vehicles are checked out on-line and specific policies are available at the front desk. Departmental vehicles are only to be used for teaching and local research functions. They are not to be used to travel to UI classes, are not for personal use, and should be kept fueled and clean enough for the President to borrow them.

Copy Machine Use

The copy machines in VBR, Clark 116 and ASLB 101A/201 are to be used only for copying materials that are clearly related to a faculty research project, or to copy course materials for the course in which the student is a TA. Graduate students may not use an AS copy machine to copy any personal material such as classroom notes, term papers, books, theses, etc. When in doubt, consult your advisor. Copy machines available for copy card and personal use are located at Copy Centers, French Administration Building, and at all libraries on campus.

Travel

For liability and reimbursement purposes, all students must complete a Travel Authority form for any business-related trip taken that is outside of Pullman (or any other station for off-campus students). These forms are available on-line at <https://business-center.cw.wsu.edu/travel/>. At least 14 working days before a trip, this form must be submitted, and signed by the department chair. If you need reimbursement, you must complete a Travel Expense Voucher within one week of your return. An approved Travel Authority does not imply expenses will be covered or reimbursed. You should clarify if, how and what expenses will be covered with your advisor prior to requesting a Travel Authority form. Additionally, per diems are limited and you should find out what the limit is for your destination.

You are strongly urged to attend professional meetings. However, the department does not pay travel expenses of graduate students. Advisors may use grant or project monies to pay full or partial travel expenses for graduate students attending meetings. The Graduate School disburses some grant-in-aid travel funds, which can be used for travel to professional meetings. Application forms for student travel grants may be obtained from the Graduate School, French Administration Building, Room 324 or <https://gradschool.wsu.edu>. It is advisable to apply for a travel grant if you are presenting a quality paper at a professional meeting. The Animal Sciences Graduate Student Association (ASGSA) raises funds to support graduate student travel for members active in the organization. Contact the President of the ASGSA for details. In addition, space may be available in a University vehicle being taken to a meeting, or faculty members may share travel expenses.

Graduate Student Representatives

All graduate students in the university who are currently enrolled in 10 or more hours are members of the Graduate and Professional Student Association (GPSA). GPSA represents the concerns of graduate students within the university and nationally. The AS graduate program elects one representative to the GPSA Senate (the governing body for GPSA). Many of the important advisory committees within the university also have voting positions for graduate students. Students are encouraged to become involved in positions of interest. To contact the GPSA, you may visit <https://www.gpsa.wsu.edu/>, go to 308 Compton Union Building, or call (509) 335-9545.

Courses at the University of Idaho

You may register for WSU course(s) taught at UI via “myWSU” along with your other courses. The end of the semesters at UI and WSU do not coincide. Therefore, after the WSU grade submission deadline, you will not receive a grade for the UI course(s) on your initial grade report but it will be updated later to include your grade. There currently is no public transportation to the U of I campus and departmental vehicles are not available for this purpose.

Evaluations

The Graduate School requires an annual review of each graduate student (see Appendix). In Animal Sciences this review includes academic performance, research accomplishments and, when applicable, performance as a TA. These reviews are conducted by the advisor in consultation with the student’s guidance committee and discussed with the student. If your progress is unsatisfactory, your thesis or dissertation committee will be consulted to determine if graduate student status should be continued. The Department Chair will notify the student in writing of the committee's recommendation and forward a copy of the report to the Graduate School.

Teaching Assistants are also evaluated at the end of the semester by their students and the faculty member in charge of the course. If your teaching performance is unsatisfactory, your thesis or dissertation committee will be consulted to determine if your TA appointment should be discontinued. The Department Chair will notify the student in writing of the committee's recommendation and forward a copy of the report to the Graduate School.

Unethical and inappropriate behavior

Plagiarism, harassment and research misconduct will NOT be tolerated. Students failing to follow guidelines dictated by the Office of Student Conduct may face dismissal from Washington State University. Please see the following websites for more information on appropriate conduct go to the website of the Office of Student Accountability and Conduct (<https://communitystandards.wsu.edu/>). The Washington State University Policy on Faculty-Student and Supervisor-Subordinate Relationships is available at <https://policies.wsu.edu/prf/index/manuals/executive-policy-manual-contents/ep28-faculty-student-supervisor-subordinate-relationships/>

Grievances

If grievances arise, the student should discuss the problem with their thesis advisor and/or the Department Chair, or as a final resort, the WSU Ombudsman. The WSU Ombudsman Office is in Wilson Hall, Room 2 and may be contacted by visiting <https://ombudsman.wsu.edu/> or by calling (509) 335-1195. Grievance procedures through the Graduate School are available at <https://gradschool.wsu.edu/documents/2017/07/gs-grievance-procedures.pdf/>

Graduate School Policies and Procedures

The Graduate School website has all of the updated policies and procedures as well as all of the on-line forms that you will need as you navigate your program. The website is <https://gradschool.wsu.edu/>. Policies and Procedures are at <https://gradschool.wsu.edu/policies-procedures/>.

Degree Programs

Thesis or Dissertation expectations

All students should develop a thesis or dissertation proposal after consultation with their advisor and committee. This proposal forms the basis for the thesis/dissertation research. All students are expected to develop and carry out original, creative research projects. While the advisor and committee members serve as mentors, the student is expected to develop and demonstrate the ability to work independently; to design, conduct, and analyze experiments; and to prepare the work for publication in scientific journals.

Thesis or dissertation preparation involves synthesizing concepts by interpreting experimental and analytical data that are gathered for that purpose. It constitutes a major part of the creative scholarship in a master's or doctoral program. Experience in preparing and writing a research publication, as well as the peer-review process, are important goals of graduate programs.

Master of Science Degree

Thesis Option: Animal Sciences only offers a thesis degree program. The thesis describes a research project conducted by the student. The thesis typically has three sections: a background or literature review that sets the stage for the research; a section with one or more chapters describing the actual research and containing data and analysis; and a general conclusion. Students are encouraged to write the thesis in manuscript form. The final exam is in two parts. The first is a public seminar presenting the results of research project. The seminar is followed by an oral exam that focuses on defense of the research project. All thesis committee members must attend the thesis defense and vote. Other faculty members may attend and ask questions. All members of the faculty are allowed to vote.

Non-Thesis Option: The AS department does not offer a non-thesis option.

Doctor of Philosophy Degree

The degree of Doctor of Philosophy (Ph.D.) is awarded in recognition of excellence in scholarship and for an original contribution to the advancement of science. The degree is awarded for originality and creative scholarship rather than for an accumulation of academic credits.

The Ph.D. program is separated into the "initial" period preceding the preliminary examination and the "candidate" period following the preliminary examination. During the initial period, the student acquires knowledge and skills needed for his/her research program. In addition, this is the period when a major portion of the academic program is completed. The preliminary exam must be completed no later than the fourth semester into the Ph.D. degree program if the student has entered the PhD program with an MS degree and no later than the 6th semester if the student enters with a BS degree. After passing the preliminary examination, the candidate concentrates on research and preparation of the dissertation.

During the candidate period, the doctoral candidate demonstrates his/her ability to do original research. The final oral examination should reflect that students have developed into mature scientists, which includes the ability to conceive research projects, to critically evaluate the literature, to gain knowledge of acceptable scientific behavior, and to think and discern outside the area of the dissertation. The final exam is in two parts. The first is a public seminar presenting the results of research project. The seminar is followed by an oral exam that focuses on defense of the research project. All thesis committee members must attend the thesis defense and vote. Other faculty members may attend and ask questions and all members of the faculty are allowed to vote.

Advisor:

The *major advisor* is the thesis or dissertation advisor and is the graduate student's primary contact for all matters related to the program of study and thesis research. The major advisor assists in selection of the thesis committee and development of a program of study and thesis research proposal. The major advisor monitors the student's academic and professional growth, reviews program changes, and arranges for graduate student support.

If housed off-campus, the major advisor should consider a "*campus advisor*" to support the academic development of the student. Although the major advisor is responsible for advising the student on experimental design and manipulation and interpretation of data, and for reviewing initial drafts of theses/dissertations and papers, the student will be integrated into the campus advisor's research program. For those students whose research program focus is off-campus, the "*campus advisor*" will answer day-to-day questions while the student is in Pullman and will invite the student to research group meetings, journal clubs, and similar activities.

Committee:

All students have a thesis or dissertation advisory committee. The students must meet with their committee at least once per academic year. The committee aids in developing the course program and provides guidance and expertise for the student's research. In addition to advising

the student, each committee member must read the thesis or dissertation, attend, and vote at the preliminary and final exam. Committee members also participate in the annual student evaluation. Committees must be approved by the Department Chair and the Graduate School.

The minimum number of committee members for a MS degree program is three, including the advisor.

A Ph.D. committee should consist of the chair and at least the three additional members.

- At least one of the additional members should be from outside the department.
- At least 50% of the committee must be members of the Graduate Program in Animal Sciences.

Academic Programs:

Your thesis committee has the sole responsibility and flexibility to develop the program of study with you. After your program has been approved by your committee and by the Department Chair (generally the second semester), it is your responsibility to have appropriate forms prepared and signed by your committee and Department Chair, and submitted for final approval by the Graduate School. You may request revisions in your program should the need arise. Your Committee, and the Department Chair, must approve all revisions. Revisions must be sent to the Graduate School on approved forms that are available at <https://gradschool.wsu.edu/>.

Program of Study:

All students should become familiar with the Graduate School course requirements as outlined on the Graduate School website at <https://gradschool.wsu.edu/>. The program of study is planned by the student in concert with the advisor and thesis committee and submitted to the Department Chair for approval.

Once the program has been approved and submitted to the Graduate School, the program becomes official. Students are required to take all courses listed on the "Program of Study". Students may also choose to take courses not on the official program. Ideally, the "Program of Study" form is completed and submitted to the Graduate School during the first semester. The "Program of Study" form must be filed with the Graduate School by the end of the second semester. A flexible number of credits are allowed for research and thesis (700 or 800 level) each semester. **Students are required to register for a minimum of 2 credits of AS 700 or 800 each semester.** A greater number may be used to bring their credit load up to the minimum, 10 credits required each semester to maintain full-time student status. Courses for audit may not be used for the program of study. Any course listed on the student's Program of Study in which a grade of "C" or below is earned must be repeated (but not on a pass/fail basis) until a higher grade is obtained. All courses must be listed in the official WSU Course Catalog.

Masters program. An MS degree requires a total of 30 credits. Twenty-one of those credits must be graded credits and the remaining 9 are AS 700 (Thesis research). No more than six of the graded credits may be taken at the undergraduate level (300-400 level only). The Department

requires MS students to take AS 500 (Seminar in Animal Sciences) twice, AS 520 (Preparation of Scientific Literature in Animal Sciences), and a graduate level statistical design course.

Ph.D. program. To earn a Ph.D. at WSU students are required to earn 72 total credits. Animal Science requires a minimum of 22 graded graduate credits including AS 500 (Seminar in Animal Sciences) twice, AS 520 (Preparation of Scientific Literature in Animal Sciences), and a graduate level statistical design course. In addition to the graded graduate credits, students may count up to 9 undergraduate credits (300-400 level) toward the needed 72. The bulk of the credits taken by a Ph.D. student are AS 800 credits (Dissertation research). Students who have earned an MS degree prior to entering the PhD program may transfer up to half of the needed graded graduate level credits toward the PhD program. See the Graduate School policies and procedures for clarification and current policies.

Preliminary Doctoral Examination

The preliminary exam is an exam to determine if a student is qualified to be admitted into candidacy for the PhD degree. The exam assesses knowledge of animal science, ability to think critically and independently, and ability to conduct independent research (form hypotheses, design experiments, collect and analyze data, put the research in context of the current state of knowledge, and draw conclusions).

The oral examination must be scheduled with the Graduate School using a “Preliminary Exam Scheduling Form” found at <https://gradschool.wsu.edu/documents/2018/01/exam-scheduling.pdf/>. All committee members must attend and vote. Other members of faculty may attend, and members of the graduate faculty in the department may also vote. The purpose of the oral exam is to allow faculty to have the opportunity to probe the depth of a student’s knowledge of the whole field of Animal Science and the ability of the student to think critically and independently. There are two prelim options for students and their committee to choose between.

Option 1.

The student will develop a research proposal, on a topic that is developed by the student and their committee, that will be distributed to members of the committee, and be available to the graduate faculty, 2 weeks prior to the oral presentation. This proposal must be a unique document prepared by the student that demonstrates his/her understanding of the objectives of this research, as well as the strategies and procedures that will be used to address these objectives. A copy of your proposal must be made available to the Department Chair with your scheduling form. This copy will be made available for review in the main office. The format of the document is to be a research proposal using USDA, NSF or NIH guidelines and is expected to be complete (i.e. all forms completed in addition to the actual research proposal). Copies of other proposals outside the area of the proposal should be given to the student as examples. It is the student’s responsibility to schedule a room for the seminar and distribute seminar announcements a week ahead of the presentation.

The student will prepare and deliver an oral presentation related to the proposal, which will be open to faculty, staff and students. The seminar must be announced to the department a week prior to conduct by email, posting etc. Following the presentation, the student will participate in a 2-3 hour (approximately) question and answer session with committee members and interested faculty. Suggestions offered by faculty outside of the student's committee should be taken into consideration. However, these suggestions should not be deemed as mandatory points that must be changed. The discussion and questions may range from the proposal to other areas as well to examine the breadth and depth of student knowledge.

Option 2.

All members of the graduate committee will prepare written questions that examine the student's knowledge in the sciences relevant to the student's chosen discipline. Questions and instructions will be submitted to the major advisor prior to the conduct of the exam. After the written exam has been completed, usually a week or so, an oral exam will be scheduled. Since the oral and written portions of the exam constitute the whole exam, the oral exam will be given even if the student fails all or a portion of the written exam. It is appropriate for the student to seek and be given feedback on areas of the written exam in which they need to prepare for the oral exam. Copies of the written exam should be made available for review by the whole committee at the time of the oral exam.

The oral exam, approximately 2-3 hr in length, must be attended by all members of the committee and may be attended by any member of the graduate faculty. The vote to pass or fail a student must include all committee members and any other member of the Animal Sciences graduate faculty who attended the entire oral exam.

Preliminary exam failure:

Should the student fail the exam, the committee will recommend whether the student should have another exam or be dis-enrolled from the departmental graduate program. Generally, the student will be given an option for another exam. A student who fails the prelim exam the second time is terminated from the graduate program. Procedures to be followed in the event of a failed exam are available on the Graduate School website.

Thesis/Dissertation preparation

Students are expected to publish thesis or dissertation research in an appropriate scientific journal. If the student has not submitted thesis or dissertation results for publication within a reasonable amount of time after passing the final exam, the thesis or dissertation advisor will have the option of publishing the student's thesis or dissertation results. In this case, authorship order may change.

Formal guidelines for preparation of the thesis or dissertation are available from the Graduate School.

Students on research appointments will continue to collect and analyze data, write, etc., during the final semester or summer session. Research results generated after submission of the thesis or dissertation to the committee will not automatically be accepted as essential material. If the advisor(s) considers it appropriate, the data collected during the final semester may be used in the final draft.

The following schedule provides guidelines for ensuring a reasonable amount of time for completion of each step and gives details of post-thesis approval and preparation of a manuscript for publication.

Number of Weeks to Allow for Activity

2 to 6 weeks for draft review by major advisor

- Submit drafts to major advisor and allow time for incorporation of the appropriate number of corrections and revisions. Allow 7 to 10 days for each revision by advisor(s) and allow sufficient time for discussion with them.

2 weeks for review for committee

- Submit a revised draft for review by your graduate committee. Because of the greater number of reviewers, allow *at least* two weeks for return of this draft.

2 to 4 weeks for incorporation of revisions

- Revise and correct draft. This is a critical time because you will be getting comments on the draft from your committee for the first time.

2 weeks for new draft review

- Resubmit the draft to the committee or to selected committee members. All technical aspects of the thesis or dissertation should be worked out at this point.

2 weeks-prior to defense date

- Submit a “final oral scheduling form” and copy of your thesis or dissertation to the Graduate School. Submit a “final” draft to each committee member and to the department chair *at least* 5 days prior to scheduling your final exam.

Some important dates, e.g., the last date to schedule a final oral, apply for a degree, thesis due at the graduate school, etc., are announced each semester and the dates and scheduling forms may be found on the Graduate School website, <https://gradschool.wsu.edu/>.

The student is required by the Graduate School to give an approved copy of the thesis or dissertation to the Department Chair at least 5 days prior to the oral examination. At this time seminar announcements should be prepared and distributed to the department.

Concluding Comments: Normally, a minimum of 8 to 16 weeks is required from the time you submit your thesis or dissertation to your advisor to the time of your final oral exam.

Final Oral Exam and Thesis/Dissertation Binding:

The final exam has two parts: a seminar and a defense. The seminar is presented before the defense and is a public presentation highlighting the research results and major accomplishments, as previously described. All graduate students are strongly encouraged to attend all final exam seminars. The defense is an oral exam at which the student defends the approach, methods,

conclusions, background, etc., of the research. Faculty are encouraged to attend the exam and ask questions. Questions asked during the final exam do not have to relate to the thesis or dissertation research.

The student's major professor, the thesis/dissertation committee, and the Department Chair must approve the date and time of the final oral exam and thesis/dissertation seminar. The Graduate School deadlines, guidelines and final exam scheduling form may be found by visiting, <https://gradschool.wsu.edu/>.

Members of the thesis or dissertation committee are responsible for checking the thesis or dissertation for content, style and format. They certify their approval that the thesis or dissertation is ready to be submitted to the WSU library with minimal edits when they sign the "final oral scheduling form". Thus Committee members cannot sign off on a final exam schedule form if they have not had ample time to review your thesis. Two weeks is a reasonable amount of time for review by the faculty.

A copy of your thesis must be made available to the Department Chair with your scheduling form. A clean thesis copy must be given to all committee members and the Department Chair a week prior to the thesis defense. The Chair's copy will be made available for review in the main office. It is the student's responsibility to schedule a room for the seminar and distribute seminar announcements a week ahead of the presentation.

At the time of scheduling, the Graduate School will check the title page, signature page, the abstract, and margins. They will accept and inspect the thesis or dissertation after the final oral examination. Please go to the Graduate School website for thesis and dissertation guidelines. The "defense" copy of your thesis must be given to the committee and the Department Chair five days prior to the scheduled defense date.

Upon completion of the oral exam, a signed copy of the thesis/dissertation must be presented to the Graduate School within five working days. This copy should include revisions required by the committee as discussed during the defense. It is the committee's choice to sign the signature page after the defense or to withhold signatures until revisions are completed. The student is responsible for announcing the seminar to the department at least a week prior to its conduct.

When the thesis or dissertation is completed and accepted, the department pays for the hardcover binding of one copy of your thesis for the animal sciences library. It is the student's responsibility to request a purchase order from the main office. The hardcover binding for the thesis is to be a burgundy color. Put the title, name and date on the front cover and put name and date on the spine. Please also submit a CD of the thesis or dissertation to the main office.

Continuation for Another Degree:

To continue for another degree you should contact the Graduate Coordinator. The following forms/cards may be picked up from the Graduate School:

1. Completed MS and continuing for a PhD in the same department.
2. Changing from a PhD to a MS degree in the same department.
3. Not completing a graduate degree and continuing as an undergraduate.

Graduate Leave Status

If you must interrupt your graduate program by leaving WSU please see the Graduate School website and apply for Graduate Leave Status.

(<https://gradschool.wsu.edu/documents/2014/12/graduate-leave-status-form.pdf/>)

Exit

Before departure from AS, students must leave a forwarding address and schedule an exit conference with the Department Chair, return all keys to the main office, and consult with the advisor about cleaning up samples, chemicals, etc., from the student's research and office space. All data belongs to the major advisor (University) and laboratory books, electronic data files and other information needs to be turned in to your major advisor prior to leaving. Discuss expectations with your advisor.

Graduation

Students visit the Graduate School website, <https://gradschool.wsu.edu/>, early in the semester during which they expect to graduate and obtain information regarding procedures and deadlines for thesis defense and graduation. Failure to meet the deadlines could require enrollment for an additional semester. Each semester the Graduate School announces the "Graduation Fair" where students may reserve academic garb and sign up to participate in the ceremony. While MS students may walk in Commencement ceremonies without having officially graduated, PhD students may not. All requirements for the degree of Doctor of Philosophy must be completed for a student to participate in the graduation ceremony.

Jobs

The Department Chair periodically emails job listings for positions suited to students with animal sciences training. If you are on the graduate student list serve you will receive them. If you wish to remain on the list after you finish your degree, contact the Department Chair to continue to be included.

Example degree timeline

Master's degree Semester 1

Discuss thesis projects with major professor

Form a guidance committee

Submit an approved "program of study" to the Graduate School

Semester 2-course work and research/writing

Semester 3-course work and research/writing

Apply for graduation

Semester 4 (and summer)

Finalize thesis and defend

PhD Degree (student already has an MS degree)

Semester 1

Discuss dissertation projects with major professor

Coursework/research

Semester 2

Course work and research/writing

Form a guidance committee

Submit an approved “program of study” to the Graduate School

Semester 3-course work and research/writing

Course work/research/writing

Meet with committee to plan/schedule preliminary exam

Semester 4

Course work and research/writing

Complete preliminary exam

Semester 5

Research/writing

Committee meeting to present data and begin to plan for defense time

Semester 6

Research/writing

Defense (if appropriate)

A student who begins the Ph.D. program after their BS program can expect to take their preliminary exam during the 5th or 6th semester and should plan that the entire program will take between 4-6 years depending on the research project and the student.

Graduation Checklist

1. Apply for graduation the semester prior to the one in which you wish to defend. Check Graduate School cutoff dates.
2. Check the dates for the semester you wish to defend on the Graduate School website. Plan thesis/dissertation preparation and review accordingly. Backwards planning will give you an idea of when things must be done. For example, to defend at the end of Spring semester a thesis/dissertation must be finished by spring break (mid-March) and to defend in fall semester all writing must be done by the end of October.
3. Look at the guidelines for formatting the thesis/dissertation given on the Graduate School website.
4. Schedule a committee meeting to discuss what will be in the thesis/dissertation. Make certain to clarify committee expectations on the thesis/dissertation content and format.
5. Write, consult with your major advisor, submit to the committee, make edits etc.
6. Schedule a defense date with your committee keeping in mind Graduate School dates.
7. One week prior to your defense
 - give clean copies of your thesis/dissertation to your committee and the Department Chair
 - make a seminar announcement to give to Jeremy for electronic posting

- send an email to the entire department announcing the seminar.
8. Bring signature pages and a black pen to your defense.
 9. The Department requires a hard copy and a CD of your thesis. Please have one printed/cut and turn it in to the main office (Clark 116) for binding so it may be placed in the department library.
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APPENDIX

EXAMPLE

GRADUATE STUDENT EVALUATION

Please attach the student's cv listing awards and scholarships, publications, and student service contributions.

To be filled out by student

Name _____ Evaluation Date _____

Cumulative Graduate GPA _____ Expected graduation date _____

Date enrolled _____ Date Program filed _____

Advisor _____

Committee names

Dates the committee met

Title or subject of thesis
project

List teaching experience. Include course number, semester, and responsibility

To be filled out by advisor

Animal Science Masters Student Competencies

Please identify the student's performance level on the scalar below taking into account **their stage** in graduate work.

Advanced knowledge of area of emphasis: Thorough knowledge of area of emphasis as reflected by academic performance, ability to cite relevant scientific literature, and ability to integrate information from different sources.

1 Poor	2	3 Adequate and acceptable	4	5 Exceptional
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Competency in collection, analysis, and reporting of data in their area of emphasis: Ability to organize and collect data accurately and precisely, analyze collected information statistically, and summarize important information in oral and written form.

1 Poor	2	3 Average and acceptable	4	5 Exceptional
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An appreciation of the scientific method and ethical practice in data collection, analysis, and reporting: Understanding of the scientific method and the importance of ethical practices in data collection, analysis and reporting.

1 Poor	2	3 Average and acceptable	4	5 Excellent
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Professional conduct. Student conducts himself/herself in a professional manner in interactions with others. Student is respectful of others.

1 Poor	2	3 Professional in most situations	4	5 Professional manner in all situations
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Competency in oral communication: Student can communicate ideas, concepts, research findings, and questions using appropriate vocabulary and scientific presentation skills.

1 Difficulty	2	3 Average ability	4	5 Exceptional ability
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Competency in scholarly writing: Student can write and depict scientific data, in a clear, organized, accurate fashion. Extensive editing of grammar, spelling, sentence structure, and organization should not be needed.

1 Student has difficulty writing coherently	2	3 Average ability	4	5 Student displays exceptional writing abilities.
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Comments on competencies

Comment on improvement since last evaluation

RECOMMENDATIONS

1. Probable success in completing degree requirements.
2. _____ Continue enrollment _____ Discontinue enrollment
3. Probable success as a Ph.D. candidate.

SIGNATURES

Committee Chair	Agree	Disagree	Comments by Committee

TO BE SIGNED BY STUDENT: Signature only indicates you have read this evaluation. You may attach your own comments.

This evaluation has been discussed with me.

Name

Date

Animal Sciences Computing Policy

COMPUTER & NETWORK USE POLICY

(Visit <https://policies.wsu.edu/prf/index/manuals/> to view all WSU policies.)

Please read the following excerpt from WSU's Electronic Publishing Policy and **sign your name** to indicate you have been informed of this policy. The Department of Animal Sciences reserves the right to deny access to anyone violating the terms of this agreement.

APPROPRIATE USE

WSU's computer resources, information technologies, and networks may be used for legitimate WSU purposes only. Thus, appropriate use of WSU's computer resources, information technologies, and networks includes:

Students: All appropriate use by students related to completion of WSU class assignments or their education at WSU; and

Employees: All appropriate use by faculty, administrators, and staff directly related to instruction, research, and scholarly, professional, and administrative endeavors on behalf of WSU or within the scope of WSU employment. Students while working in their WSU employment capacities will be governed by policies for employees.

INAPPROPRIATE USE

WSU computer resources, information technologies, and networks shall **NOT** be used for:

- Utilizing network bandwidth to download files (movies, music, etc.) unrelated to any WSU or student educational purpose;
- Supporting, establishing, or conducting any private business operation or commercial activity;
- Attempting to gain unauthorized access to any portion of the system or using WSU computer resources, information technologies, and networks as a staging area to attempt to gain unauthorized access to any other system or account;
- Violating WSU's policy of prohibiting discrimination against individuals on the basis of race, sex (including sexual harassment), religion, age, color, creed, national or ethnic origin, physical, mental, or sensory disability, marital status, sexual orientation, and status as a Vietnam-era or disabled Veteran;
- Intentionally disseminating, accessing, or providing a hyperlink to obscenity, as that term is defined by the law, unless such activities are directly related to an employee's legitimate research or scholarship purpose or to a student's completion of an academic requirement;
- Sending unsolicited electronic mail (e.g., "spam") in violation of Washington law or in quantities that interfere with WSU's or another's server. Senders who anticipate sending large numbers of unsolicited electronic mail messages at one time are responsible for consulting with the appropriate server administrator prior to determine whether or not the sending of the mail is likely to cause a malfunction in a server;

- Engaging in political activities that violate state law (state law prohibits the use of state facilities or public resources for the purposes of assisting in an election campaign or for the promotion or opposition to a ballot proposition);
- Destroying, altering, compromising the integrity or security, or making inaccessible WSU computer resources, information technologies, and networks when such uses are not authorized;
- Utilizing WSU resources with the purpose of intentionally interfering with others' use of computing resources, information technologies, or network resources or conduct of WSU business;
- Compromising the privacy of users of the computer resources, information technologies, and networks;
- Violating copyright law (thus, information technology and network users who do not hold the copyright on a work must have permission to publish information, graphics, cartoons, photographs, or other material, or the publication must be otherwise permitted under copyright law);
- Violating trademark law;
- Violating any federal, state, or local law;
- Copying of software in violation of a license or when copying is not authorized; or
- Violating WSU policy. Expressing opposition to any WSU policy using computer resources, information technologies, and networks is not a violation of WSU policy.

I have read and understand the Appropriate/Inappropriate Use Policy

Signature _____