



Michigan State University

*DEPARTMENT OF
ANIMAL SCIENCE*

*GRADUATE STUDENT
HANDBOOK*

2025 – 2026

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I. PROGRAM OVERVIEW

A. Graduate Degrees from Michigan State University's Department of Animal Science

The Department of Animal Science advances basic and applied knowledge of animal biology, behavior, and health that benefits humans and animals. Our activities are grounded in assuring safe, efficient, and sustainable production of animal food and fiber while improving animal welfare and minimizing environmental impact.

The Department of Animal Science offers Master of Science and Doctor of Philosophy degree programs in animal science. Programs of study are based on the strengths of the department's graduate faculty and the goals of individual students. Although individual student programs vary, all graduate programs in animal science are designed to meet these **student learning outcomes**: 1) provide a strong foundation in biological science and an in-depth knowledge of a specific biological discipline of importance to animal agriculture, 2) develop creative potential and foster independent thought, 3) improve technical skills, and 4) provide the foundation for effective, independent careers in research, teaching, extension, or agribusiness.

Major fields of study include animal behavior, animal welfare, epigenetics, genetics, genomics, reproductive and developmental biology, animal nutrition, growth and physiology, immunology, and data science/precision livestock farming. Applied and basic research span animal production, animal biology, and biomedicine. Research for theses or dissertations may focus on beef or dairy cattle, sheep, swine, horses, poultry, companion, or laboratory animal species. Modern animal, computer, and library facilities support students' research.

The latest National Research Council ranking of doctoral programs positioned our Ph.D. program among the top 10 comparable Ph.D. programs in the nation. We consistently have between 30 and 40 graduate students, with an approximately equal split between Master's and Ph.D. students and between domestic and international students. At least 90% of our graduate students are funded on assistantships through faculty grants and endowments, on teaching assistantships, on fellowships, or on sponsored funds provided by the student's country.

Upon degree completion, approximately 95% of our graduates find employment with industry (e.g., Bayer Crop Science, Cargill Animal Nutrition, Charles River, Diamond V, Dow Chemical, Hy-Line International), academic institutions (e.g., Kansas State University, Michigan State University, North Carolina State University, Purdue University, University of Florida, University of Wisconsin), state agencies (e.g., Michigan Department of Agriculture; Michigan Department of Environment, Great Lakes, and Energy), and federal agencies (e.g., U.S. Department of Agriculture, U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency). Many international students remain in the U.S. to further their education (as PhD students or post-doctoral associates) or they return to their home countries where they are employed by academic institutions, government agencies, or international corporations.

B. Opportunities and Expectations

1. Participating in the Departmental Community

- a. *Departmental Seminars*: Each month during the academic year, the department holds a department seminar. Seminars cover a range of animal-science related subjects. Students are expected to attend these seminars to broaden their knowledge of animal science beyond their discipline or to deepen their knowledge if the subject relates to their field of research.
- b. *Department Meetings and Retreats*: The Department of Animal Science holds meetings every third Friday that are open to the graduate students, postdocs, faculty, and staff of the department. Participation in these meetings is encouraged as a way of interacting with the broader departmental community. Each fall the department holds a retreat at the start of the new academic year, and graduate students are often invited to attend. Retreats present an opportunity to get to know members of the department more deeply and to participate in events that shape the department's future trajectory in ways that impact students as well as faculty.

- c. *Animal Science Graduate Student Association (ASGSA)*: The ASGSA is a vibrant, student-led organization that hosts social and professional activities. Monthly ASGSA meetings are a valuable way to meet others in the department beyond a graduate student's lab or office. Participation in the ASGSA is strongly encouraged as a great opportunity to build community and learn about the many resources available for graduate students within and beyond the department (e.g., workshops, funding, internship opportunities, etc). For more, see section IX.D.1.
- d. *Major Professor's Laboratory Activities*: Major professors typically hold lab meetings on a regular basis to bring their students, postdocs and technicians together. In some cases, a professor may also work with their trainees to create a journal club or to arrange visits to farms, industry groups, other laboratories or to attend conferences or other professional meetings.

2. Presenting Research

- a. At least half of our graduate students attend and present their research at regional, national, and international scientific meetings or conferences annually. Presenting research is key at such meetings is important for disseminating knowledge and for meeting others working in your research area—and is often important in moving to the next step. Many of our students have been recognized by their respective scientific societies for their oral presentations, posters, or broader research accomplishments.
 - 1) Graduate students should discuss which scientific conferences or professional meetings their major professor typically attends and where they will be expected to present their work.
 - 2) You should also plan to become a student member (typically with low annual dues) of appropriate scientific or professional societies, again after discussion with your major professor.
- b. The major professor of a student presenting research at a conference or meeting typically compensates the student for part or all the expenses of the trip.
- c. Partial support for graduate student travel to present research is available through various sources including the department. See VIII.D.6 for details.

3. Demonstrating Mastery

- a. Throughout the graduate program, students are expected to demonstrate their mastery of animal science subject matter in different ways. This mastery is expected to deepen over time as a result of coursework, self-study, engagement in research, and discussions with major professors, committee members, fellow students, and other scientists working in the areas. Graduate school is an individual experience and often requires work on the part of the student to find and master specific knowledge.
 - 1) Meetings between graduate students and major professors provide major professors with an informal way to frequently assess a student's progress with mastery of subject matter. Students are expected to read scientific literature as they prepare to design experiments, conduct research and prepare presentations, papers and theses/dissertations. Knowledge gained from such background reading should inform a student's discussion with their major professor and provide evidence to the major professor of a student's gains over time.
 - 2) Committee meetings offer a yearly opportunity for graduate students to demonstrate what they are learning about their area of research and, over time, should allow them to impress their committee with their growth in knowledge and ability to communicate as well as confidence of their mastery of the subject.
 - 3) Graduate students' performance in their courses is a way of demonstrating understanding of each subject they learn about and course performance is critical to maintaining good standing in the graduate program.
 - 4) PhD students are also expected to demonstrate their knowledge and preparedness during their PhD proposal defense and during their comprehensive exams. The proposal defense represents a time for the guidance committee to evaluate the merits of the PhD candidate's plan for their dissertation research, and the student is expected to explain decisions they have made and the science they are building their research upon. During the comprehensive exams the PhD

candidate demonstrates their mastery of subjects in animal science, statistics, and other areas related to their ability to conduct research in, teach about and competently represent the field of animal science upon their graduation.

- 5) When students proceed to the defense of their thesis or dissertation research, they are expected to demonstrate mastery of the specific area they have studied. As each graduate degree represents a unique research question and method of studying it, the graduate student should clearly represent that they are the subject matter expert in that specific realm by the time of their defense.

4. Other Individual Development Experiences

- a. All Department of Animal Science graduate students are expected to develop individual development plans to help them achieve goals beyond their research work. Each year, students will work to update these with their major professor and during departmental graduate student workshops.
 - 1) Students are expected to submit their Individual Development Plan with their annual progress reports each January. A template for the individual development plan can be found at https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students.
- b. Graduate students interested in academic careers can seek teaching, grant writing, and mentoring experiences.
 - 1) Students interested in teaching should indicate interest in being a graduate teaching assistant (TA) to the graduate program director. They can also search for opportunities to guest lecture from individual instructors or attend teaching workshops (<https://grad.msu.edu/teaching>). Formal education about best teaching practices can be obtained in ANS 801 Methods of Teaching Animal Science or by completing certificate in college teaching from the MSU Graduate School (<https://grad.msu.edu/cctp>).
 - 2) Grant writing workshops are regularly offered by the MSU Graduate School, and grant writing courses for credit are offered by several departments including animal science. Check the course catalog at www.reg.msu.edu by searching 'grant writing' in the key words for current options.
 - 3) Graduate students often have opportunities to mentor undergraduates on research projects. The graduate school offers many mentoring tools (<https://grad.msu.edu/optimizing-mentoring>).
- c. Graduate students who have an interest in working in industry can complete internships or work on industry collaborative projects that may lead to permanent employment.
- d. Those students who aspire to government service can seek internships with both state and federal agencies.
- e. Students with an interest in extension can participate in extension programming in the field or gain experience in crafting communication pieces for distribution through MSUE's website, newsletters and social media outlets.
- f. Domestic graduate students have also been awarded international fellowships to do a portion of their research outside the U.S.

C. Year-by-Year ANS Graduate Program Highlights

Year	Event	MS Degree	PhD Degree
Annually	Complete Research Overview in GradPlan	Start of each academic year. See IV.B.1.c	Start of each academic year. See IV.B.1.c
	Complete Responsible and Ethical Conduct in Research (RECR) requirements	Complete requirements for each year of program as described in VI.I.2	Complete requirements for each year of program as described in VI.I.2
	Hold guidance committee meeting. Submit report	At least once in each year of program. See II.B.2.g	At least once in each year of program. See II.C.1.h
	Submit annual progress report (every January)	Every January. See VI.E.1	Every January. See VI.E.1
	Meet one-on-one with grad program director	Every January. See VI.E.1.i	Every January. See VI.E.1.i
Year 1	Form guidance committee and create course plan	By end of second semester. See II.B.2 and II.B.3	By end of second semester. See II.C.1 and II.C.2
Year 2	Defend dissertation proposal	Not applicable	Required. Must be done by end of 4 th semester after starting PhD. See II.C.5
	Defend MS thesis	Usually done at end of 2 nd year. Must be done by end of 5 th year after starting MS. See II.B.7	Not applicable
Year 3	Written and oral Ph.D. comprehensive exam ¹	Not applicable	Usually done by end of 3 rd year. Must be done by end of the 7 th semester after starting PhD. See II.C.6
Year 4	Defend PhD dissertation	Not applicable	Usually done at end of 4 th year. Must be done by end of 8 th year after starting PhD. See II.C.7
Final Year	Take graduate seminar course (ANS 885)	Take spring semester of final year. See II.B.3.b	Take spring semester of final year. See II.C.2.d.1,2
	Complete courses and research credits	See II.B.3	See II.C.2
	Complete steps to hold defense	See II.B.7	See II.C.7
	Complete graduation application, exit survey	See IV.B and II.B.9	See IV.B and II.C.10
	Submit thesis/dissertation electronically	See II.B.7.h	See II.C.7.p

¹ If the comprehensive exam has not been completed by the end of the fifth year of the degree program, university regulations require that permission to take the exam be granted by the Dean of the College of Agriculture and Natural Resources and approved by the Dean of the Graduate School.

II. PROGRAM COMPONENTS/DEGREE REQUIREMENTS

A. Application and Admittance

1. Procedures and Policies for Application and Admittance

- a. Procedures and policies for submitting applications and gaining admittance to the Department of Animal Science graduate program are outlined on the department website at www.canr.msu.edu/ans/students/graduate_program/application_process.

B. Master of Science Program

1. The Master of Science degree is offered under two options

- a. Plan A: This consists of coursework, research, writing of a thesis, and a final examination covering coursework and the thesis.
- b. Plan B: This consists of coursework, a scholarly activity without a thesis, and a final examination covering coursework and the scholarly activity.

2. Guidance Committee

- a. The student's guidance committee shares in the responsibility for reviewing the graduate student's progress and guiding the student toward completion of course and program requirements and preparing the student for professional success after graduation. Thus, it is important that serious consideration be given to the composition of the guidance committee by both the student and major professor to ensure relevant professional guidance and compatibility. It is also critical that there is not a conflict of interest between interests of the committee members and those of the student. Of particular concern are situations in which a potential voting member of the committee is from outside MSU and is, in some fashion, connected with the funding of the student's project.
 - b. The guidance committee must be established prior to a student submitting their proposed academic program (i.e., plan of coursework; see next section), which must be filed by the end of the second semester of the degree program.
 - c. The guidance committee for a Master's student will consist of at least four faculty members (including the major professor). The major professor must have an appointment, including adjunct, in the MSU Department of Animal Science. The three remaining members of the guidance committee will be identified by the student and the major professor.
 - 1) At least three members of the committee (including the major professor) must be regular MSU faculty (those appointed under the rules of tenure with the rank of assistant, associate or full professor). In addition to the major professor, at least one other committee member must have a majority appointment in the Department of Animal Science, and at least one committee member must have a majority appointment in a department other than Animal Science.
 - 2) The department chair may grant an exemption to allow an emeritus faculty member to serve as one of the required MSU faculty members (but not as major professor).
 - 3) An exception may be granted to allow non-tenure system faculty or academic specialists to serve on the guidance committee as one of the required MSU faculty or to serve as a MS student's major professor. In addition, exceptions may be granted to allow a committee member to be external to MSU.
 - i. Contact the Department of Animal Science graduate program director if one or more desired committee members are non-tenure system MSU faculty or are from outside of MSU.
 - ii. The graduate program director must submit the request for approval to the Graduate School, and exceptions for non-regular or external committee members must be approved by the Dean of the Graduate School.
- For more information on the Graduate School's procedure for approving fixed-term MSU faculty, academic specialists, support staff, and non-MSU individuals as committee members, visit: <https://grad.msu.edu/non-regular-faculty-committees>.

- d. The responsibilities of the guidance committee consist of:
 - 1) Advising graduate students on coursework, research or creative activities.
 - 2) Providing, at least annually, feedback and guidance concerning progress toward the degree.
 - 3) Administering final examinations in a fair and professional manner.
 - 4) Reviewing the thesis or dissertation in a timely, constructive manner.
- e. The student will submit their proposed guidance committee to GradPlan (<https://student.msu.edu/>), which will then be routed for approval. Before submitting their committee to GradPlan, students are encouraged to discuss their proposed committee with the graduate director (Janice Siegford). To ensure uniform standards across the department, the graduate program director or department chair may add one appropriate member to the guidance committee.
- f. If there is a need to change the composition of the guidance committee after it has been approved, the student should first consult with the graduate program director. The committee members who will remain on the committee should be informed of the anticipated change in composition and consulted in naming a replacement. The student will enter the revised committee composition into GradPlan, which will be routed for approval.
- g. The guidance committee and graduate student will meet at least once a year. After the meeting, the student will submit a report to the graduate program director summarizing the outcome of the meeting (using the form available at on the ANS Graduate Students Forms page https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students).

3. Academic Program and Coursework

- a. After establishing the guidance committee, and before the end of their second semester, students will enter their proposed plan of coursework into GradPlan (<https://student.msu.edu/>), which will be routed for approval. The student should convene a meeting of the guidance committee to discuss coursework prior to entering and routing in GradPlan.
- b. The Master's degree obtained under either Plan A (with a thesis) or Plan B (without a thesis) has a minimum requirement of 30 credit hours at or above the 400 level, and more than 50% of these required credits must be at or above the 800 level. Required as part of the minimum 30 credits is a graduate seminar course (ANS 885, Animal Science Seminar).
- c. Plan A Master's students are required to take a minimum of six credits and a maximum of 10 credits of Master's thesis research (ANS 899), which count toward the 800 level credit requirement.
- d. Plan B Master's students may take up to six credits of Master's research (ANS 898), which counts toward the 800 level credit requirement.
- e. The courses that will be counted toward the required 30 credits are proposed by the student to the guidance committee, which has final authority, and must be approved in GradPlan.
 - 1) Courses taken on a credit – no credit basis will not count toward the graduate degree.
 - 2) Students must receive a 2.0 or better in a course for that course to count toward their degree.
 - 3) Students may take a maximum of 8 credits of graduate level independent study (ANS 890) across all their MSU degrees (i.e., BS, MS, and PhD).
- f. Students must maintain a cumulative grade point average (GPA) of at least 3.0. For retention purposes, the GPA will be calculated on all courses taken the first year and courses required by their guidance committee thereafter.
 - 1) Students will be allowed one semester to bring their GPA equal to or greater than 3.0 to retain their assistantship and two semesters for retention as a graduate student.
 - 2) Part-time students taking less than a regular course load will be allowed eight credits to attain a GPA of 3.0 or greater.
- g. The required work for a deferred grade (DF), including ANS 898 credits, must be completed and a grade reported within six months with the option of a single six-month extension. If the required work is not completed within the time limit, the DF will become U (unfinished) and will be changed

to DF/U under the numerical and pass – no grade (P-N) grading systems, and to DF/NC under the credit – no credit (CR-NC) system. This rule does not apply to graduate thesis or dissertation work.

- h. Students currently in a master's degree program who wish to transition into a doctoral program either prior to finishing the master's degree program or after completing their master's degree may request a change of graduate major through GradPlan, and the request will route for approvals.

4. Responsible and Ethical Conduct in Research (RECR) Training

- a. The student is also required to complete Responsible and Ethical Conduct in Research (RECR) training each year to achieve the requirements described in the RECR plan (see VI.1.2 and https://www.canr.msu.edu/ans/students/graduate_program/responsible-conduct-of-research/).

5. Annual Progress Report

- a. Each student must complete an annual progress report in as described below in section VI.E.

6. The Master's Thesis (Plan A) or Scholarly Activity (Plan B)

- a. The Master's thesis (Plan A) is a written description of the student's Master's research that is generally organized such that the document contains a scientific abstract appropriate for the discipline, a lay abstract appropriate for the general public (this abstract will be posted on the departmental web site), an introduction to the general research problem and a summary of relevant literature, chapter(s) describing the research, and a discussion that addresses the implications and significance of the results. It is common practice to prepare the thesis in the form of a manuscript(s) appropriate for a peer-reviewed journal. If one or more chapters of the thesis has been published in a peer-reviewed journal, each published chapter must be introduced with the list of all authors and the citation for the publication. For manuscripts not published in open access journals and/or for which the authors do not hold the copyright, a copy or notation of the written permission from the copyright holder (generally the publisher) to reprint the article should also be included. If multiple papers make up the thesis, these must be "tied together" with a required general introduction and summary/discussion. In the case of a multi-author chapter, the student should include an accompanying statement of what specific work he/she did, what specific part(s) of the chapter they wrote and what other authors contributed. If the guidance committee feels the student's contribution to the chapter is minor compared to the other authors, the student will not be able to use the published chapter for the thesis. The guidance committee may give the student the option to write the chapter in question independently.
- b. Salient features of the scholarly activity (Plan B) should be: (1) focused on a topic or within a discipline, (2) discrete boundaries so that completion is certain, and (3) sufficient depth and quality to convey scholarly pride for the student, the department, and Michigan State University.
- c. The department strongly suggests that students use the software "iThenticate" to check for unintentional plagiarism. Information regarding this program is available at <https://tech.msu.edu/teaching/tools/ithenticate/>.
- d. The thesis problem or scholarly activity shall be selected by the student in consultation with the major professor and approved by the guidance committee and is also a component of the academic program (GradPlan).
- e. Any deviation from the prescribed coursework, research, or thesis for the Master's degree must be approved by the major professor, guidance committee, department graduate program director or chairperson, and dean (via revisions submitted to GradPlan).
- f. The thesis must be prepared in accordance with the Graduate School's Formatting Guide for Master's Theses and Doctoral Dissertations (<https://grad.msu.edu/etd/>).
- g. Prior to distributing the thesis to the committee, the thesis must be considered acceptable (documented in writing) for the final exam by the student's major professor and one guidance committee member, known as the reader.
 - 1) The reader should receive the thesis two weeks before it is given to the full committee to allow the reader enough time to critically review the document.

- 2) The reader should primarily review the quantity and quality of scientific content of the thesis to verify that an acceptable amount of work has been satisfactorily completed and written up. Comments regarding grammar and formatting can be reserved and shared after the defense when other committee members will also provide their feedback.
- 3) Once the reader and major professor deem the thesis acceptable, the Approval to Hold Defense Form (<https://www.canr.msu.edu/ans/students/ANS+Approval+to+Hold+Defense.docx>) must be signed by the major professor, the reader, and the graduate program director.
- 4) The signed form must be shared with the graduate program administrator, Karla Macelli, who will then assist the student in preparing and distributing the announcement for the oral defense.
- h. After approval to hold the defense is granted, the thesis must be circulated to all members of the guidance committee at least 14 days prior to the Master's final examination.
- i. Master's degree students are strongly encouraged to submit their thesis/scholarly activity for publication in a peer-review journal if judged appropriate by the major professor and the guidance committee.

7. Thesis Defense and Final Oral Examination

- a. The final Master's examination is the culmination of a student's graduate education and training and reflects not only on the accomplishments of the graduate student, but also on the quality of the graduate program.
- b. Every student (Plan A or B) must pass a final oral examination administered by the guidance committee to complete the requirements for the Master's degree. Questions posed to the student focus on the thesis/scholarly activity but may also pertain to coursework. The purpose of the exam is to ensure that the student has a basic understanding of animal science, the chosen area of specialization, and the principles of conducting research.
 - 1) Students should tentatively schedule their final defense well in advance to assure a date is confirmed on committee members' calendars, but, as described above, the defense cannot take place without submission of the Approval to Hold Defense Form. The student must not put the guidance committee into jeopardy by assuming that the student's commitments take precedence over this timetable.
- c. For Plan A students, the final exam should focus on, but not be limited to, thesis research (ANS 899). For Plan B students, the final exam should focus on, but not be limited to, the scholarly project (ANS 898).
- d. Before the final exam, the student will present a seminar on his/her research (Plan A) or scholarly activity (Plan B). At least two weeks before the seminar, the student or major professor must notify the graduate program assistant of the title, date, time, and location of the seminar. This can be done when the signed Approval to Hold Defense form is shared with the graduate administrative support person. The graduate program assistant can assist with room scheduling and will advertise the seminar to all department faculty, students, and staff.
- e. The student must be enrolled in at least one credit in the semester of thesis/scholarly project defense. Master's students defending in the summer semester do not need to enroll in a credit.
- f. The guidance committee administering the Master's final examination is charged to approve Master's work (Plan A or B) and to evaluate the qualifications of a candidate to pursue a Ph.D. degree (Plan A only).
- g. At least 75% of the committee must judge the student's thesis/scholarly activity and/or defense to be acceptable. The student is given a single opportunity to correct all deficiencies within a time frame specified by the guidance committee. (see i. below).
- h. After the Master's final examination (defense), the major professor should inform the graduate program director by formal report
(https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students) (1)

- whether or not the student passed; (2) an inventory of votes for approval or dissent; and (3) recommendation of the committee regarding the candidate starting a Ph.D. program.
- i. In the event that less than 75% of the members of the guidance committee consider the thesis/scholarly activity and/or its defense acceptable, the deficiencies, expected corrections, and time limit for completion of the corrections will be explained in detail to the student both verbally and in writing.
 - 1) A copy of the written explanation will be forwarded to the graduate program director.
 - 2) The student will be given one opportunity to rectify the deficiencies within the time frame specified by the guidance committee.
 - 3) Upon reassessment of the thesis/scholarly activity and/or its defense, the major professor should inform the graduate program director by final report (see h. above) if the student was successful in addressing the concerns of the guidance committee.
 - 4) If not successful, the student is terminated.
 - j. MSU only accepts electronic theses submitted electronically. The instructions for electronic submissions are available from <https://grad.msu.edu/etd/>, including tutorials and other resources to help you with formatting.
 - 1) The target date for the FINAL APPROVAL of an electronic thesis by the Graduate School for graduating the semester of that submission is set by the Graduate School and posted on the Graduate School calendar (<https://grad.msu.edu/calendar>).
 - i. Be aware that a successful submission of the document via ProQuest does not mean that the document has been APPROVED.
 - ii. The review process is interactive and final approval can take anywhere from a few hours to weeks, depending upon the extent of the necessary revisions and how diligent the author is when making the necessary revisions.
 - k. At the time of submission to ProQuest, authors can create an ORCID (Open Researcher and Contributor ID) that provides researchers with a unique identifier for linking their research outputs and activities. An ORCID (1) improves recognition of research contributions, (2) reduces form-filling, (3) works with many institutions, funders, and publishers, and (4) is a requirement of many journal manuscript submission systems. To learn more about ORCID go to: <https://vimeo.com/237730655>.
 - l. In keeping with MSU's public mission, the University requires that theses, dissertations, and abstracts will become public after the conferral of the degree; embargoes can only be pursued for a limited period.
 - 1) Students submitting a thesis/dissertation to ProQuest may request a hold/embargo of publication by ProQuest by contacting the Graduate School at msuetds.approval@grd.msu.edu.
 - 2) In response to the request, the Graduate School will send directly to the student a form that needs to be completed and returned to the Graduate School prior to the document submission to ProQuest.
 - 3) The form needs to be signed by the student's major professor and by the Associate Dean of the student's college.
 - 4) The request for the hold/embargo may be for six months, one year or two years. Requests for a period longer than six months must include a written justification for the length of the requested hold/embargo.

8. Degree Timeline and Residency

- a. The total time allowed for completion of the requirements for the Master's degree is five calendar years from the date of enrollment in the first course included for degree certification.
- b. To meet residence requirements, a minimum of six credits in the degree program must be earned in residence on campus (in the East Lansing area).

9. MSU Graduate School Exit Survey

- a. The Graduate School requires a short online exit survey for all MSU graduate students. Only students who have applied for graduation will have access to the survey.
- b. The survey asks questions about educational experiences in MSU graduate programs, as well as about immediate professional plans. The Graduate School uses data from this survey when reviewing graduate programs and to guide decisions about services and initiatives for graduate students.
- c. The identity of all respondents will be kept confidential and only aggregate (group) information will be made available to faculty and administrators.
- d. Students will receive an e-mail message from the dean of the graduate school with a link to the survey. However, students do not need to wait for that e-mail message to complete the survey after applying for graduation. It takes about 5-10 minutes to complete the online survey.
- e. The instructions for completing the survey are available from <https://grad.msu.edu/etd/>. Contact exitsurvey@grd.msu.edu for any issues with the MS student exit survey.

C. Doctoral Program

1. Guidance Committee

- a. The student's guidance committee shares in the responsibility for reviewing the graduate student's progress and guiding the student toward completion of course and program requirements and preparing the student for professional success after graduation. Thus, it is important that serious consideration be given to the composition of the guidance committee by both the student and major professor to ensure relevant professional guidance and compatibility.
- b. The guidance committee must be established prior to a student submitting their proposed academic program (i.e., plan of coursework; see next section), which must be filed by the end of the second semester of the degree program.
- c. The guidance committee will consist of five or more faculty members (including the major professor. The major professor (who is designated as the Dissertation Director in GradPlan) must have an appointment, including adjunct, in the MSU Department of Animal Science. The remaining members of the guidance committee will be identified by the student and the major professor.
 - 1) At least four members of the committee (including the major professor) should be regular MSU faculty (those appointed under the rules of tenure with the rank of assistant, associate or full professor). In addition to the major professor, at least one other committee member must have a majority appointment in the Department of Animal Science, and at least one committee member must have a majority appointment in an MSU department other than Animal Science.
 - 2) The department chair may grant an exemption to allow an emeritus faculty member to serve as one of the required MSU faculty members (but not as major professor).
 - 3) An exception may be granted to allow non-tenure system faculty or academic specialists to serve on the guidance committee as one of the required MSU faculty members (but not as a PhD student's major professor or committee chair). In addition, exceptions may be granted to allow a committee member to be external to MSU.
 - i. Contact the Department of Animal Science graduate program director if one or more desired committee members are non-tenure system MSU faculty or are from outside of MSU.
 - ii. The graduate program director must submit the request for approval to the Graduate School, and exceptions for non-regular or external committee members must be approved by the Dean of the Graduate School.
 - iii. For more information on the Graduate School's procedure for approving fixed-term MSU faculty, academic specialists, support staff, and non-MSU individuals as committee members, visit: <https://grad.msu.edu/non-regular-faculty-committees>.

- d. The chair of the guidance committee is chosen by the committee members. The chair cannot be the major professor but must have a majority appointment in the Department of Animal Science and must be a tenure-system faculty member. It is the guidance committee chair's responsibility to coordinate administration of all examinations required for the Ph.D. degree. The chair will ensure that all votes of pass or fail are entered on the appropriate form at the conclusion of the scheduled exam and that the form is submitted to the graduate administrative support person in a timely manner. The chair is also responsible for communicating verbally and in writing to the student any concerns, recommendations and/or requirements of the guidance committee including reexamination within a specified time frame determined by the guidance committee. This written report should be shared with the guidance committee members and with the graduate program director.
- e. The responsibilities of the guidance committee consist of:
 - 1) Advising graduate students on coursework, research or creative activities.
 - 2) Providing, at least annually, feedback and guidance concerning progress toward the degree.
 - 3) Administering comprehensive and final examinations in a fair and professional manner.
 - 4) Reviewing the research proposals and dissertations in a timely, constructive manner.
- f. The student will submit their proposed guidance committee to GradPlan (<https://student.msu.edu/>), which will then be routed for approval. Before submitting their committee to GradPlan, students are encouraged to discuss their proposed committee with the graduate program director. To ensure uniform standards across the department, the graduate program director or department chair may add one appropriate member to the guidance committee.
- g. If there is a need to change the composition of the guidance committee after it has been approved, the student should first consult with the graduate program director. The committee members who will remain on the committee should be informed of the anticipated change in composition and consulted in naming a replacement. The student will enter the revised committee composition into GradPlan, which will be routed for approval by the department and university.
- h. The guidance committee and graduate student will meet at least once a year. After the meeting, the student will submit a report to the graduate program director summarizing the outcome of the meeting (using the form available at on the ANS Graduate Students Forms page https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students).

2. Academic Program and Coursework

- a. In consultation with the student's major professor, the student plans a program of study that includes courses related to one of the areas of specialization within the field of animal science (see Program Overview, page 5), seminars, and teaching experience.
- b. The student will submit their program of study through GradPlan (<https://student.msu.edu/>).
- c. Twenty-four ANS 999 credits are required for graduation; students can enroll for a maximum of 36. A student who must exceed the maximum of 36 credits of ANS 999 should contact the graduate program director for assistance in processing an override request.
- d. The number of course credits that are required will be dependent on whether the student is starting from a Bachelor's degree or a Master's degree.
 - 1) If a student has not completed a Master's degree, a minimum of 20 course credits (400 level or above with at least half of those credits at or above the 800 level, including ANS 885, Animal Science Seminar) must be taken in addition to 24 credits of doctoral dissertation research (ANS 999).
 - 2) If the student has completed a Master's degree, there is no minimum number of credits required other than 24 credits of doctoral dissertation research (ANS 999). However, a doctoral student must take ANS 885 if it was not taken during the Master's degree.
 - 3) Courses to be taken are determined by the guidance committee before the student submits these to GradPlan.
 - i. Courses taken on a credit - no credit basis will not count toward the graduate degree.

- ii. Students must receive a 2.0 or better in a course for that course to count toward their degree.
 - iii. Students may take a maximum of 8 credits of graduate level independent study (ANS 890) across all their MSU degrees (i.e., BS, MS, and PhD).
- e. Students must maintain a cumulative grade point average (GPA) of at least 3.0. For retention purposes, the GPA will be calculated on all courses taken the first year and courses required by their guidance committee thereafter.
 - 1) Students will be allowed one semester to bring their GPA equal to or greater than 3.0 to retain their assistantship and two semesters for retention as a graduate student.
 - 2) Part-time students taking less than a regular course load will be allowed eight credits to attain a GPA of 3.0 or greater.
- f. The required work for a deferred grade (DF) must be completed and a grade reported within six months with the option of a single six-month extension. If the required work is not completed within the time limit, the DF will become U (unfinished) and will be changed to DF/U under the numerical and pass – no grade (P-N) grading systems, and to DF/NC under the credit – no credit (CR-NC) system. This rule does not apply to graduate thesis or dissertation work.
- g. The student's major professor and guidance committee must approve the student's program of study, including the dissertation research topic by the end of the second semester after admission into the program. Approvals are obtained electronically through routing in GradPlan.

3. Responsible and Ethical Conduct in Research (RECR) Training

- a. The student is also required to complete Responsible and Ethical Conduct in Research (RECR) training each year to achieve the requirements described in the RECR plan (see VI.1.2 and https://www.canr.msu.edu/ans/students/graduate_program/responsible-conduct-of-research).

4. Annual Progress Report

- a. Each student must complete an annual progress report as described below in section VI. E.

5. Dissertation Research Proposal

- a. The dissertation project shall be selected by the student in consultation with the major professor and approved by the guidance committee.
- b. Doctoral students are required to write a formal dissertation research proposal describing their proposed doctoral work and to defend the proposal in front of the guidance committee by the end of the fourth semester after initiation of the doctoral program.
- c. The dissertation proposal will be prepared in consultation with the major professor and submitted to the guidance committee no less than two weeks before defense of the proposal.
- d. The dissertation proposal will be prepared and formatted according to guidelines appropriate for an extramural grant proposal relevant to the student's area of study, including appropriate background information, hypotheses to be tested, specific aims, experimental approach and methodology, anticipated results and potential pitfalls and limitations.
- e. For defense of the dissertation proposal, the student will present a formal seminar outlining the proposed doctoral research and address questions raised by the committee. The dissertation proposal will serve as a blueprint for the doctoral research project.
- f. Successful preparation and defense of the dissertation proposal will be determined by vote of the guidance committee. The chair of the guidance committee (not the major professor) will poll the committee members and insure that the votes are entered on the Doctoral Research Proposal form (https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students). To pass, at least 80% of the committee members must approve both the written and oral components of the proposal defense. The Doctoral Research Proposal form must be signed by the major professor and committee members and submitted to the graduate administrative support person by the guidance committee chair.

- g. Written feedback on the written and oral components of the dissertation proposal evaluation, will be provided to the student by the chair of the guidance committee. If the student does not pass both components of the proposal defense, the written feedback will guide the student as to what revision/remediation will be required for passing, within the time frame specified by the committee. The student has no more than two opportunities (the original and one re-evaluation) to pass the dissertation proposal evaluation. The written report should be shared with the guidance committee members and with the department graduate program director.
- h. If the student does not successfully pass the dissertation proposal evaluation, the student and committee will discuss the option of a student pursuing a Plan A or Plan B Master's degree, if appropriate. If pursuing a Master's degree is not an option, the student will no longer be retained as a graduate student.
- i. Successful preparation and defense of the dissertation proposal is a prerequisite for taking the comprehensive or preliminary exam.

6. Comprehensive/Preliminary Exam

- a. The student must pass the Ph.D. comprehensive examination in order to be considered a Ph.D. candidate.
- b. The comprehensive examination, sometimes referred to as the preliminary examination, is the gateway to the Ph.D. degree. The major professor and guidance committee must seriously consider the attributes of the Ph.D. candidate and remember that the candidate, upon graduation from the Ph.D. program, is a representative of the major professor, the department, and the university. Therefore, the major professor must be certain that the Ph.D. student is prepared to take the Ph.D. comprehensive examination and that they will meet the high standards required of doctoral candidates.
- c. The student should take the comprehensive exam when the program coursework is substantially complete as determined by the guidance committee, but no later than the end of seven semesters of enrollment in the doctoral program.
- d. An oral comprehensive examination (oral exam) is mandatory for all potential Ph.D. candidates. Eligibility for the oral exam will be determined in part by: (1) completion by the student of a substantial portion of the coursework comprising the program as determined by the guidance committee, (2) judgment by the major professor that the student is prepared, and (3) performance of the student on the written comprehensive examinations (written exam) taken. Each member of the guidance committee will decide whether or not to give a written exam, but the university requires at least one written exam. Thus, the number of written exams can vary from one to a number equivalent to the total number of committee members for any student. A written exam is graded only by the committee member giving the exam. All guidance committee members giving a written exam will notify both the student and the chair of the guidance committee if he/she judges the student to be ready to take the oral exam. At least 80% of the guidance committee must agree that the student is ready to take the oral exam.
- e. When the performance of the student on the written exam is not acceptable (less than 80% of the guidance committee recommending scheduling of the oral exam), the relevant guidance committee member(s) giving the exam(s) will either re-examine the student or will assign activities in area(s) that the student is judged to be weak. The student will be allowed a total of two opportunities to progress to the oral portion of the comprehensive exam within the time frame specified by the guidance committee.
- f. To pass the oral exam, 80% of the committee must agree that the performance is acceptable.
- g. When the performance of the student on the oral exam is not acceptable or marginal, the guidance committee will re-examine the student or will assign activities in area(s) that the student is judged to be weak. The student will be notified in writing by the chair of the guidance committee of deficiencies noted and proposed means for remediation within the time frame specified by the

guidance committee. This written report should be shared with the guidance committee members and with the department graduate program director.

- h. In order to pass the comprehensive exam, 80% of the committee must agree that performance on both the written and oral exams is acceptable. If performance on the comprehensive exam is not acceptable or is marginal, the guidance committee will re-examine the student or will assign activities in area(s) that the student is judged to be weak.
- i. A student will have no more than two opportunities (original plus one re-exam) to demonstrate acceptable performance on the oral comprehensive exam. The decision to allow reexamination will be at the sole discretion of the guidance committee and all of the committee members must approve the decision.
- j. The interval from the failed oral exam to repeat oral exam will be at least one semester, but no more than six months, unless a written waiver is requested by the major professor, signed by all of the guidance committee members, and submitted to the graduate program director. A waiver must explain extenuating circumstances that will prevent the student from retaking the comprehensive exam within a six-month period and when the circumstances will be rectified.
- k. After each comprehensive exam, the chair of the guidance committee shall submit the Record of Comprehensive Examinations form (https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students) including any supplemental written report(s) to the graduate administrative support person within seven days of said comprehensive exam. Once a student is deemed to have passed the comprehensive examination, the graduate administrative support person will enter the date that the exam was passed into GradPlan, and the completion date will route to the graduate program director for departmental approval.

7. Doctoral Dissertation and Final Oral Examination

- a. The Ph.D. dissertation is a written description of the student's original doctoral research that makes a significant contribution to knowledge.
- b. The Ph.D. dissertation is generally organized such that the document contains a scientific abstract appropriate for the discipline, a lay abstract appropriate for the general public (this abstract will be posted on the departmental web site), an introduction to the general research problem and a summary of relevant literature, a methods section that describes methodology in sufficient detail to allow supplication of the research, a results section that presents relevant data and a discussion that addresses the implications and significance of the research.
- c. It is common practice to prepare dissertation chapters in manuscript form for subsequent submission to peer-reviewed journals. If one or more chapters of the dissertation has been published in a peer-reviewed journal, each published chapter must be introduced with the list of all authors and the citation for the publication. For manuscripts not published in open access journals and/or for which the authors do not hold the copyright, a copy or notation of the written permission from the copyright holder (generally the publisher) to reprint the article should also be included. If multiple papers make up the dissertation, these must be "tied together" with a required general introduction and summary/discussion. In the case of a multi-author chapter, the student should include an accompanying statement of what specific work he/she did, what specific part(s) of the chapter they wrote and what other authors contributed. If the guidance committee feels the student's contribution to the chapter is minor compared to the other authors, the student will not be able to use the published chapter for the dissertation. The guidance committee may give the student the option to write the chapter in question independently.
- d. The department strongly suggests that students use the software "Ithenticate" to check for unintentional plagiarism. Information regarding this program is available at <https://tech.msu.edu/teaching/tools/ithenticate/>

- e. It is expected that the Ph.D. dissertation or portions of the dissertation will be published in a reputable peer-reviewed journal(s) and that the dissertation research and the dissertation itself reflect that expectation.
- f. Regardless of the specific approach chosen, the dissertation should be prepared in accordance with the Graduate School's Formatting Guide for Doctoral Dissertations (<https://grad.msu.edu/etd/>).
- g. Every doctoral student must successfully defend their Ph.D. dissertation, which is based on the original research project that was evaluated by the guidance committee during the dissertation proposal defense (see II.C.4).
- h. The student must be enrolled for at least one credit in the semester of dissertation defense.
- i. Every student must pass a final oral examination coordinated by the chair of the guidance committee to complete the requirements for the Ph.D. degree.
 - 1) Students should tentatively schedule their final defense well in advance to assure a date is confirmed on committee members' calendars, but the defense cannot take place without submission of the approval to hold defense form. The student must not put the guidance committee into jeopardy by assuming that the student's commitments take precedence over this timetable.
- j. Prior to distribution of the dissertation to the committee, it must be considered acceptable (documented in writing) by both the student's major professor and one other guidance committee member, known as the reader.
 - 1) The reader should receive the dissertation two weeks before it is given to the full committee to allow the reader enough time to critically review the document.
 - 2) The reader should primarily review the quantity and quality of scientific content of the dissertation to verify that an acceptable amount of work has been satisfactorily completed and written up. Comments regarding grammar and formatting can be reserved and shared after the defense when other committee members will also provide their feedback.
 - 3) Once the reader and major professor deem the dissertation acceptable, the Approval to Hold Defense Form (https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students) must be signed by the major professor, the reader, and the graduate program director.
 - 4) The signed form must be shared with the graduate program administrator, Karla Macelli, who will then assist the student in preparing and distributing the announcement for the oral defense.
- k. After approval to hold the defense is granted, the dissertation must be circulated to all members of the guidance committee at least 14 days prior to the Ph.D. final exam.
- l. The dissertation will be presented in the form of a seminar to members of the university and public. The seminar will immediately precede the final defense (oral examination) of the dissertation before the guidance committee. At least two weeks before the seminar, the student or major professor must notify the graduate program assistant of the title, date, time, and location of the seminar. This can be done when the signed Approval to Hold Defense form is shared with the graduate administrative support person. The graduate program assistant can assist with room scheduling and will advertise the seminar to all department faculty, students, and staff.
- m. To pass the Ph.D. final exam, 80% of the guidance committee must judge that the performance of the student is acceptable. If there are deficiencies in the dissertation and/or defense, the student is allowed one opportunity to correct the deficiencies within the time frame specified by the guidance committee (see o. below).
- n. After the Ph.D. final exam, the chair of the guidance committee should submit the Record of Dissertation and Oral Examination form (https://www.canr.msu.edu/ans/students/graduate_program/forms-ans-graduate-students) the graduate program director, who then signs and forwards to the graduate administrative support person, who will enter the date that the final exam was passed into GradPlan.
- o. In the event that less than 80% of the members of the guidance committee consider the dissertation and/or its defense acceptable, the deficiencies, expected corrective actions and time limit for

completion of the corrections will be explained in detail to the student both verbally and in writing by the guidance committee chair.

- 1) A copy of the written explanation will be forwarded to the graduate program director.
 - 2) The student will be given an opportunity to rectify the deficiencies within the time frame specified by the guidance committee.
 - 3) If the student was not successful in rectifying the specified deficiencies as judged by at least 80% of the guidance committee, the student is terminated.
 - 4) Upon reassessment of the dissertation and/or its defense, the chair of the guidance committee should submit the Record of Dissertation and Oral Examination form (see n. above) to the graduate program director, who then signs and forwards to the graduate administrative support person, who will enter the decision and date of the decision into GradPlan.
- p. MSU only accepts dissertations submitted electronically. The instructions for electronic submissions are available from <https://grad.msu.edu/etd/>, including tutorials and other resources to help you with formatting.
- 1) The target date for the FINAL APPROVAL of an electronic dissertation by the Graduate School for graduating the semester of that submission is set by the Graduate School and posted on the Graduate School calendar (<https://grad.msu.edu/calendar>).
 - i. Be aware that a successful submission of the document via ProQuest does not mean that the document has been APPROVED.
 - ii. The review process is interactive and final approval can take anywhere from a few hours to weeks, depending upon the extent of the necessary revisions and how diligent the author is when making the necessary revisions.
- q. At the time of submission to ProQuest, authors can create an ORCID (Open Researcher and Contributor ID) that provides researchers with a unique identifier for linking their research outputs and activities. An ORCID (1) improves recognition of research contributions, (2) reduces form-filling, (3) works with many institutions, funders, and publishers, and (4) is a requirement of many journal manuscript submission systems. To learn more about ORCID go to: <https://vimeo.com/237730655>.
- r. In keeping with MSU's public mission, the University requires that theses, dissertations, and abstracts will become public after the conferral of the degree; embargoes can only be pursued for a limited period.
- 1) Students submitting a thesis/dissertation to ProQuest may request a hold/embargo of publication by ProQuest by contacting the Graduate School at msuetds.approval@grd.msu.edu.
 - 2) In response to the request, the Graduate School will send directly to the student a form that needs to be completed and returned to the Graduate School prior to the document submission to ProQuest.
 - 3) The form needs to be signed by the student's major professor and by the Associate Dean of the student's college.
 - 4) The request for the hold/embargo may be for six months, one year or two years. Requests for a period longer than six months must include a written justification for the length of the requested hold/embargo.

8. Degree Timeline and Residency

- a. The total time allowed for completion of the requirements for the Ph.D. degree is eight calendar years from the date of enrollment in the first course included for degree certification.
- b. Residence on campus (in the East Lansing area) is required for one academic year. This is defined as two consecutive semesters with completion of credits at the level of full-time status of graduate work each semester.

9. Full Time Status

- a. Full time status for doctoral candidates is defined as a minimum of one credit for those students who have successfully completed the written and oral preliminary (comprehensive) exams and are actively engaged in dissertation research or are doing department approved off-campus fieldwork related to preparation of their dissertation. Before completion of the comprehensive exams, full time status for doctoral students is 6 credits without an assistantship or 3 credits with an assistantship.

10. MSU Graduate School Exit Survey

- a. The Graduate School requires a short online exit survey for all MSU graduate students. Only students who have applied for graduation will have access to the survey.
- b. The survey asks questions about educational experiences in MSU graduate programs, as well as about immediate professional plans. The Graduate School uses data from this survey when reviewing graduate programs and to guide decisions about services and initiatives for graduate students.
- c. The identity of all respondents will be kept confidential and only aggregate (group) information will be made available to faculty and administrators.
- d. Students will receive an e-mail message from the dean of the graduate school with a link to the survey. However, students do not need to wait for that e-mail message to complete the survey after applying for graduation. It takes about 5-10 minutes to complete the online survey.
- e. The instructions for completing the survey are available from <https://grad.msu.edu/etd/>. Contact ExitSurvey@grd.msu.edu for any issue with the PhD student exit survey.

D. Animal Science Theses/Dissertations Libraries

1. Locations of Theses/Dissertations Accepted by the Department

- a. After acceptance and processing, all theses and dissertations from Department of Animal Science graduate students are available electronically through the University Library in the ProQuest Dissertations and Theses Global database.

E. Interdisciplinary Options

1. Specializations and Dual Majors

- a. Several specializations and dual majors exist that may be compatible with a MS or PhD in animal science. Please visit these pages for up to date information about available programs.
 - 1) Dual degrees, graduate specializations, and certificates directly relevant to ANS:
https://www.canr.msu.edu/academics/graduate/graduate_teaching_certificate/
 - 2) Additional graduate specializations and certificates available at MSU:
<https://grad.msu.edu/interdisciplinary-graduate-study>

F. Shared Programs - Undergraduate to Graduate

1. Shared Programs UG2G

- a. Shared Programs – Undergraduate to Graduate (also referred to as Shared Programs-UG2G) provide an opportunity for academically talented undergraduate students to enroll in graduate courses and conduct research towards a graduate degree while completing the last two years of their bachelor's degree(s) programs. Students must submit a request and be approved to participate in the UG2G program prior to taking courses they wish to count toward graduate school. Students must complete their first bachelor's degree prior to starting a graduate degree program. Participation in UG2G does not guarantee admission to the ANS graduate program, and students must still complete a formal application to graduate school. To learn more, visit:
<https://reg.msu.edu/academicprograms/Text.aspx?Section=111#s328>

III. SELECTION OF THESIS/DISSERTATION ADVISOR

A. Department Guidelines

1. Initial Selection of Major Professor (for PhD program also designated as Dissertation Chair)

- a. The student's major professor is determined during the application process. Because financial support for the student's research is provided exclusively by the major professor, a student will not be accepted into the department's graduate program if a faculty member is not willing to make that commitment. Thus, it is advisable that prospective students identify and communicate with potential mentor(s) before submitting an application, so that both student and mentor feel that professional interests and personalities are compatible. Information on faculty and their interests can be found on the departmental web site (<https://www.canr.msu.edu/ans/people/>).

2. Eligible Faculty

- a. Regular faculty (those appointed under the rules of tenure with the rank of assistant, associate or full professor) having an appointment in the Department of Animal Science can accept a graduate student unless otherwise notified by the department chairperson. Non-regular faculty (i.e., fixed-term faculty or academic specialists not in the tenure system) may be approved to serve as major professor for a Master's student. The graduate program director will submit a request for approval in these cases to the Graduate School.

3. The General Role of the Major Professor

- a. A mentor, fostering a collaborative relationship with the mentee based on mutual respect and a commitment to the mentee's scientific and professional development for achieving career success.
- b. An advisor, willing to share his/her professional knowledge.
- c. A supporter, giving emotional and moral encouragement.
- d. A tutor, giving specific feedback on a student's performance.
- e. A sponsor, providing information about, and aid in obtaining opportunities.
- f. A model of the kind of person one should be to be an academic.

4. The General Responsibilities of the Major Professor

- a. Ensure that graduate students receive information about requirements and policies of the graduate program.
- b. Advise graduate students on developing a program plan, including appropriate coursework, research, or creative activity, and on available resources to complete their work.
- c. Advise graduate students on the selection of a thesis or dissertation topic with realistic prospects for successful completion within an appropriate time frame and on the formation of a guidance committee.
- d. Provide training and oversight to graduate students in creative activities, research rigor, theoretical, and technical aspects of the thesis or dissertation research
- e. Model professional integrity and ensure that their graduate students complete the Responsible and Ethical Conduct in Research (RECR) trainings (https://www.canr.msu.edu/ans/students/graduate_program/responsible-conduct-of-research/).
- f. Encourage graduate students to stay abreast of the literature and cutting-edge ideas in the field.
- g. Help graduate students to develop professional skills in writing reports, papers, and grant proposals, making professional presentations, establishing professional networks, interviewing, and evaluating manuscripts and papers.
- h. Provide regular feedback on the progress of graduate students toward degree completion, including feedback on research or creative activities, coursework, and teaching, and constructive criticism if progress does not meet expectations.

- i. Help graduate students develop into successful professionals and colleagues, including encouraging students to participate in and disseminate results of research or creative activities through the appropriate scholarly or public forums.
- j. Support students in the creation of a professional development plan that takes into account their goals and interests, and prepares them for their future career, and reviewing this plan with the student at least semi-annually. Encourage students to interact with other professionals outside of their expertise area, and to participate in appropriate professional development activities.
- k. Facilitate career development, including advising graduate students on appropriate job and career options, as well as on the preparation of application materials for appropriate fellowship, scholarship, and other relevant opportunities.
- l. Write letters of reference for appropriate fellowship, scholarship, award, and job opportunities.
- m. Provide for supervision and advising of graduate students when the major professor is on leave or extended absence.

5. Major Professor Leaves MSU

- a. If the major professor leaves MSU before a student completes the requirements for their degree, the department chair, graduate program director, major professor and student will meet prior to the faculty member leaving. The purpose of the meeting is to ensure that the student will have the guidance and financial resources necessary to complete the degree. While each situation is unique, a possible scenario is that one of the guidance committee members assumes the role as research advisor with the graduate program director or another faculty member joining the committee to ensure that the minimum requirement of four (Master's degree) or five (Ph.D. degree) committee members is met. It is expected that departing faculty members will leave sufficient funds to support the student as they finish or will transfer the student to someone who has the funds to do so. If the departing faculty member does not have sufficient funds to complete the student, the department will assume those costs.

6. Conflict with Major Professor

- a. If a graduate student and faculty mentor are having difficulties working with one another, the graduate program director and/or department chair should be notified. Both the graduate program director and department chair will strive to resolve the conflict, because leaving a major professor who is solely responsible for the student's financial support has serious implications for both the student and the faculty member. If resolution is not possible, the graduate program director, department chair and student will attempt to identify another faculty member willing to assume responsibility for the student. If the conflict is centered around unsatisfactory academic progress, performance or professional potential, the student could be dismissed from the program (see VI.G.1 for further details). If the faculty mentor is the department chair or the graduate program director, the chair of the Department Advisory Committee (DAC) will assume the role of the department chair/graduate program director in helping to resolve conflict.

IV. PROCEDURES FOR GRADUATION

A. Graduate School

1. Graduate School Website

- a. This site has the most current information on graduation requirements/timelines/procedures:
<https://grad.msu.edu/graduation/>

B. General Procedures - Master's Programs and Doctoral Program

1. Department Information

- a. The student must have completed every course in their academic program plan (GradPlan) and the necessary number of research credits (ANS 899 or ANS 999 for MS and PhD, respectively).

- b. The student must have completed the Responsible Conduct of Research requirements.
- c. The student must have completed the Research Overview in GradPlan each year of their program.
 - 1) The Research Overview requires students to review the graduate handbook, acknowledge RECR requirements, and to provide assurances they have approval for animal/human subjects in their research as appropriate.
- d. The Master's student must have successfully completed the thesis defense and the Report of MS Thesis and Oral Exam form (submitted to department and GradPlan). The Ph.D. student must have successfully completed the dissertation proposal defense (Doctoral Research Proposal form submitted to department), comprehensive/preliminary exam (Record of Comprehensive Examinations form submitted to department and GradPlan), and final oral exam/dissertation defense (Record of Dissertation and Oral Exam form submitted to department and GradPlan).
- e. The student must be enrolled for at least one credit during the semester that the final oral exam is taken. However, Master's students defending in the summer do not need to be enrolled as long as they were enrolled in the preceding spring semester.
- f. Ph.D. candidates must pass the comprehensive examination prior to completion of their dissertation and final oral examination.
- g. If the student is a Plan A Master's degree candidate or a Ph.D. candidate, a copy of the thesis/dissertation must be submitted electronically to the Graduate School and approved by the date specified on the Graduate School's web page (see <https://grad.msu.edu/etd>).

2. University/Graduate School Information

- a. The student must apply for graduation by completing and submitting an Application for Graduation form, available at <https://grad.msu.edu/graduation/>, and paying the one-time processing fee of \$50. This form should be submitted by the first week of the expected semester of graduation for the student's name to appear in the commencement program.
- b. All Graduate School information regarding graduation can be found on their website <https://grad.msu.edu/graduation/>
- c. A completed and signed letter indicating approved use of human or animal subjects for thesis/dissertation research (see VI. I. 5. and VI. I. 6.) must be submitted when the thesis/dissertation is electronically submitted. More information is available under the 'submit required paperwork' tab at <https://grad.msu.edu/etd>.
- d. The student will not graduate until the above requirements have been met. If the student misses the deadline for the semester that the final exam is completed, the date of graduation on the diploma will be changed to the semester that the above requirements are completed.
- e. If a student does not fulfill the above requirements in the semester that the final exam is completed, it is necessary to re-apply to graduate (2. a. above) each semester until the requirements are completed. An application fee is not required when re-applying.

V. PROFESSIONAL DEVELOPMENT AND AWARDS

A. Professional Development Activities

1. Animal Science Graduate Student Association

- a. The Animal Science Graduate Student Association (ASGSA) is a student-run group housed in the department that organizes activities for networking and professional development, including leadership and service opportunities. Membership in the ASGSA is free and open to all graduate students in the department.

2. Animal Science Graduate Research Forum

- a. The department sponsors an annual research day organized by a team of graduate student coordinators. The forum features research presentations by Animal Science graduate students and post-doctoral scholars.

3. Individual Development Plans

- a. Graduate students are strongly encouraged to create an individual development plan (IDP) and discuss their IDP with their major professor at least once per year. The graduate program director leads 1-2 IDP workshops each year to assist students with creating their IDP.

4. Animal Science Graduate Research Rodeo

- a. The department sponsors a friendly competition centered around delivering succinct (~3 minute) talks to lay or professional audiences that sum up a student's research and career goals.

B. Graduate Student Awards

1. Outstanding Ph.D. Student Award

- a. This award recognizes a Ph.D. candidate in the department who has demonstrated all-round excellence in academic performance, research, teaching, and service and leadership. To be eligible for this award the PhD student must have passed their comprehensive examinations.

2. Outstanding M.S. Student Award

- a. This award recognizes a M.S. student in the department who has demonstrated all-round excellence in academic performance, research, teaching, and service and leadership. To be eligible for this award the MS student must have been enrolled for at least one year.

3. Outstanding Graduate Student Teaching Award

- a. This award recognizes outstanding contributions to the Animal Science teaching mission. Both MS and PhD students are eligible for this award, and selection is based on faculty nominations.

4. Outstanding Graduate Student Service and Leadership Award

- a. This award recognizes outstanding contributions by a graduate student to the department, animal science profession, animal industry and/or broader community through their service and leadership activities. Both MS and PhD students are eligible for this award, and selection is based on nominations from the departmental community.

5. Jacob A. Hoefer Endowed Fellowship in Animal Science

- a. This competition encourages Ph.D. candidates in the department to prepare for future employment through a mock job application and interview. To be eligible for this award, PhD students must have passed their comprehensive examinations.

VI. DEPARTMENT POLICIES RELATED TO GRADUATE STUDENTS

A. Graduate Students' Rights and Responsibilities

1. Department/University Policy

- a. The MSU policy regarding graduate students' rights and responsibilities, which the department endorses can be viewed at the Graduate School website:
<https://spartanexperiences.msu.edu/about/handbook/graduate-student-rights-responsibilities/index.html>
- b. MSU requires all graduate students to complete online training about Relationship and Sexual Violence Misconduct (RVSM).
 - 1) To read MSU's policy on RSVM and Title IX, visit <https://civilrights.msu.edu/policies/>.

- 2) To access RVSM training, login to the Office of Research Regulatory Support training website at: <https://orrs.msu.edu/train/>.
- 3) Contact the Prevention, Outreach & Education department at empower@msu.edu for questions or assistance.

B. Mentoring and Advising

1. MSU Guidelines for Graduate Student Mentoring and Advising

- a. As stated by the MSU Graduate School, “Effective mentoring relationships are formed and sustained through principles of reciprocity and mutual responsibility. Mentors and mentees should respect one another both as researchers/scholars/creative practitioners and as individuals.”
- b. At the start of a student’s program, major professors and their graduate students should have a discussion on their expectations for mentoring and advising. Completing worksheets on expectations or developing an agreement can help ensure both parties explicitly voice their own expectations and understand those of the other person. Written mentor-mentee agreements can be used to create a mentorship contract that both parties agree to.
- c. For comprehensive mentoring resources to assist this conversation and ongoing mentorship, (including guidelines, a tool kit, worksheets, sample agreements, and information about training workshops on mentoring) please visit: <https://grad.msu.edu/msu-guidelines-graduate-student-mentoring-advising>

C. Graduate Assistantships

1. Description of Graduate Assistantships

- a. See Graduate School website for descriptions of types of assistantships offered at MSU and detailed descriptions of hiring procedures, start and end dates each semester, prerequisites in terms of academic standing and credit load, taxes on stipends, etc: <http://grad.msu.edu/assistantships/>.

2. Graduate Assistants in the Department of Animal Science

- a. The majority of graduate assistants in the department are research assistants (RAs).
 - 1) RAs are typically funded by the major professor, usually via grants they have written or other funds they control in MSU accounts. In some cases, students may be funded in part through a departmentally held endowment.
 - 2) A graduate assistantship funded by a professor from a grant does not transfer with the student if the student changes major professors.
 - 3) Retention of a research assistantship is subject to availability of funds and the same research standards as graduate student status (section VI.E.2).
 - 4) The research assistantship represents an obligation for the student to perform various duties of benefit to the major professor or department in return for financial assistance (20 hours per week for a half-time assistantship and 10 hours per week for a quarter-time assistantship). It is assumed that these duties, in combination with the student’s normal course of studies and writing of their thesis/dissertation, will amount to a full-time workload.
 - 5) Outside employment for research assistants is discouraged. Before beginning outside employment, the student should discuss with the major professor and the graduate program director the outside employment and how the assistantship obligations will be fulfilled.
 - 6) In summer, many students are moved from an assistantship to hourly work. In this case, the student must fill out a time sheet. The pay rate and number of hours per week typically remain the same, resulting in the same take home stipend for the student. If the student was on an assistantship in the preceding spring semester, they will continue to have health care through the summer even while working hourly.
- b. Departmentally funded teaching assistantships (TAs) are limited, and the number varies from year to year. TAs are typically ¼ time (10 hours per week) and are often combined with a ¼ time RA.

- 1) Each spring, the graduate program director will compile a list of ANS graduate students with an interest in serving as a TA during the upcoming academic year.
 - 2) The department chair will make decisions on TA appointments with input from the graduate and undergraduate program directors in consultation with the student's major professor and the course instructor.
 - 3) Students will be notified of those decisions and, after consulting with their major professor, must confirm they are willing to serve as a TA by the date specified. The course instructor will share their expectations for the TAs' engagement in the course.
 - 4) TAs are subject to the collective bargaining agreement with the Graduate Employees Union/American Federation of Teachers. To view the contract, go to <https://geuatmsu.org/about/geu-contract/>.
 - 5) International students who were required to demonstrate English proficiency as a condition for regular admission to Michigan State University must also demonstrate that they meet a minimum standard of proficiency in spoken English before they can be assigned teaching work that involves oral communication with undergraduate students. This requirement may be met by presenting a TOEFL iBT speaking section score of 27 or higher, or by passing the MSU Speaking Test (<https://elc.msu.edu/tests/msu-speaking-test/>). Students must have a score of at least 50 or waiver approval following an interview to satisfy the Speaking Test requirement.
 - 6) The same time commitment, described above for research assistantships also applies to teaching assistantships.
- c. Additional outside employment for TAs (beyond an RA as described above) is discouraged. If outside employment is being considered, the graduate student should discuss with their major professor, the instructor of the class, and the graduate program director what the outside employment is and how their assistantship obligations will be fulfilled.

D. Financial Assistance for Graduate Students

1. Externally Funded Fellowships and other opportunities

- a. The MSU graduate school offers several fellowships and sources of emergency funding. Graduate students can also apply for student loans to support their studies. Visit the MSU Graduate School Funding website for more information about the available options: <https://grad.msu.edu/funding/>.
- b. PhD candidates may be eligible to apply for pre-doctoral fellowships from government agencies such as USDA or NIH. Students are encouraged to discuss such opportunities with their major professor.

E. Academic Policies

1. Annual Progress Report for Review of Performance

- a. The review takes place annually in late January. The Annual Progress Report form is available from the graduate program director or assistant.
- b. Using the form, students list the courses completed, courses taught, publications, description of research in progress, and accomplishments and other activities important to the development of the student.
 - 1) After their first year, the student begins each new report by adding material to the previous year's report. The current year's accomplishments should be bolded. This creates a cumulative record allowing students, their major professor and committee and the graduate program director to see progress over time.
- c. The major professor reviews the annual progress report of the student in late January and provides an assessment of the student's progress in writing as part of the annual progress report and orally.
- d. The student must distribute the progress report to all members of the guidance committee. Members of the guidance committee who are within the Department of Animal Science are expected to sign

- the progress report. It is the responsibility of the student to inform the guidance committee of progress or challenges.
- e. The student may respond to comments from the major professor and/or guidance committee on the annual progress report.
 - f. The progress report is sent to the graduate program director who may in turn share it with the department graduate committee.
 - g. If the major professor's comments concerning the student's progress and/or the student's comments suggest a problem, the graduate program director will visit with both the student and major professor to facilitate resolution of the problem.
 - h. The ANS graduate committee uses the progress report to select winners of the department's annual outstanding graduate student awards.
 - i. Following receipt of annual progress reports, the graduate program director will schedule one-on-one meetings with each ANS graduate student to review progress and concerns and review opportunities to advance their individual development plan goals.

2. Retention of Graduate Student Status

- a. Show clear and satisfactory progress toward degree completion in a timely manner according to the schedule presented in the table in I.C. in the following areas:
 - 1) Grade point average (GPA)
 - i. In accordance with university policy, the minimum cumulative GPA required for graduation is 3.0 for graduate students.
 - ii. Withdrawal from a degree program will be required of any regular status student whose cumulative grade point average is below 3.0 for three consecutive semesters.
 - iii. Students will be allowed one semester to bring their GPA equal to or greater than 3.0 to retain their assistantship and two semesters for retention as a graduate student.
 - iv. Part-time students taking less than a regular course load will be allowed eight credits to attain a GPA of 3.0 or greater.
 - v. For retention purposes, the GPA will be calculated on all courses taken the first year of graduate studies in the current degree program and on courses required by the guidance committee thereafter.
 - vi. In the event a student's overall GPA falls below a 3.0, the graduate program director will inform the student in writing of the deficiency and the requirements for retention of graduate student status.
 - vii. The required work for a deferred grade (DF) must be completed and a grade reported within six months with the option of a single six-month extension. If the required work is not completed within the time limit, the DF will become U (unfinished) and will be changed to DF/U under the numerical and pass – no grade (P-N) grading systems, and to DF/NC under the credit – no credit (CR-NC) system. This rule does not apply to graduate thesis or dissertation work.
 - 2) Credits earned toward the degree
 - 3) Approval of the academic program (i.e., course plan)
 - 4) For Ph.D. degree, approval of the dissertation research proposal
 - 5) For Ph.D. degree, successful completion of the written and oral comprehensive examinations
 - 6) Abstracts, publications, and research awards received may also be used to gauge progress in a graduate program.
 - 7) This evidence must be documented in the student's annual progress report and the faculty mentor's written assessment.

F. Research Standards

1. Research Evaluation

- a. Objective minimum standards such as course grades cannot be described for performance in research. Therefore, research evaluation must reflect to a large extent the professional judgment of the major professor and guidance committee and it occurs on a semester-to-semester basis.
- b. The student's annual progress report must be completed accurately and in detail, as this report will serve as one component for the major professor's judgment of the student's performance.
- c. Other critical components will include a student's timely movement through the various requirements of the degree program (see I.C.) and fulfillment of appointment responsibilities in the previous semester.
- d. A student failing to make satisfactory research progress could be terminated at the end of the semester in question.
- e. Unethical behavior will not be tolerated and will result in immediate termination.

G. Decision to Dismiss a Graduate Student

1. Dismissal of a Graduate Student

- a. While such cases are infrequent, a student with unsatisfactory academic progress, performance or professional potential can be dismissed from the graduate program at the end of any semester. Dismissal procedures will only be instigated if no resolution can be made between the major professor, guidance committee, and student through informal, direct discussions.
 - 1) See Graduate Student Rights and Responsibilities at <https://spartanexperiences.msu.edu/about/handbook/graduate-student-rights-responsibilities/index.html>
- b. If the problem remains unresolved, the process for dismissal is as follows:
 - 1) The major professor will send a letter of intent to dismiss the student to the department chairperson, and forward the letter to the student, the guidance committee, the chair of the graduate committee, and the graduate program director.
 - 2) The student will have two weeks to provide a rebuttal to the major professor's letter of intent to dismiss, during which time he/she must request a meeting with the graduate committee to present his/her rebuttal case. The major professor will be in attendance, and the guidance committee will be invited to this meeting. During this time, the graduate committee will facilitate agreement between the student and major professor as to steps (if any) that the student must take to resolve the situation.
 - 3) Resolution of the situation must occur within six weeks from the meeting date for the student to avoid dismissal.
 - 4) The graduate committee will document in a letter to the department chairperson (and forward to the student, major professor, and guidance committee) the agreed upon action steps for the student.
 - 5) A final meeting at the end of the six-week resolution period will be held with the student, the major professor, and the guidance committee to determine if the situation has been resolved and warrants reversal of the major professor's dismissal decision. Members of the guidance committee will be invited to this meeting.
 - 6) If a final decision to dismiss the student is made, the department chairperson will notify the student, the student's major professor, the guidance committee, the dean of the college, and the dean of the graduate school of this decision in writing.
- c. If special circumstances are sufficient to justify student retention despite unsatisfactory performance (as outlined above), and if there is a reasonable prospect that the student will regain a satisfactory level of academic performance once the special circumstances are alleviated, the student will be given written notice of condition(s) to meet and a time period in which to meet them. However, the

student's unsatisfactory progress evaluation will remain in force and the student will be ineligible for an assistantship during this period.

- 1) Special circumstances include no less than a serious medical condition or extraordinary situation that is outside the student's control and directly and adversely affects academic performance.
- 2) Successful completion of the conditions placed on the student to overcome unsatisfactory performance due to special circumstance will restore the student's good academic standing and eligibility for assistantship support.
- 3) Failure to meet the conditions imposed on the student will result in dismissal of the student without further review.

H. Student Records

1. Access to Records

- a. Student records are maintained in the department's main office by the graduate program assistant.
- b. Students have the right to inspect any of their own educational records, barring confidential letters of recommendation, including their official transcript. Students also have the right to inspect reports and evaluation of his or her academic performance. The student's file typically contains the graduate application and all required documentation submitted by the student (i.e., statement of purpose, transcripts, letters of recommendation and test scores), a copy of the departmental letter of acceptance, copies and/or originals of required forms, fellowship application(s), copies of graduate research assistantship forms and/or fellowship forms, copies of graduate research assistantship renewal letter(s) from the department and responses from the student, annual progress reports and related correspondence, copies of grade reports, correspondence relative to the student, and data sheets from the Registrar's Office.

I. Integrity and Safety in Research and Creative Activities

1. Graduate School Overview

- a. Integrity in research and creative activities is based on sound disciplinary practices as well as on a commitment to basic values such as fairness, equity, honesty and respect. Graduate students learn to value professional integrity and high standards of ethical behavior through interaction with members of their academic unit and their major professor and by emulating exemplary behavior.
- b. For access to the graduate school's resources and training materials related to research integrity, visit: <http://grad.msu.edu/researchintegrity/>

2. Summary of ANS Responsible and Ethical Conduct in Research Plan (RECR)

- a. Animal science graduate students are expected to complete the online RECR course modules and discussion each year as specified in the department's Responsible and Ethical Conduct in Research Plan (https://www.canr.msu.edu/ans/students/graduate_program/responsible-conduct-of-research). In brief, students must do the following
 - 1) Year 1: all graduate students must complete 4 required online modules
 - 2) Year 2: all graduate students must complete 3 additional online modules AND by the end of Year 2, all graduate students must complete 6 hours of discussion-based training.
 - i. To assist students in meeting the discussion-based training hours, the department graduate program director will hold an RECR discussion workshop each semester (1.5h/workshop).
 - ii. Students may also register for workshops offered by the MSU graduate school or participate in one-on-one discussions with their major professor (which must be reported to the graduate program assistant).
 - 3) Year 3+: all graduate students must complete 3 hours of refresher training, which can consist of additional online modules or discussion-based training. All discussion-based training must be reported to the graduate program assistant

3. Practices That Embody Integrity in Research and Creative Activities

- a. Honesty in proposing, performing, and reporting research.
 - 1) The foundation underlying all research is uncompromising honesty in presenting one's own ideas in research proposals, in performing one's research, and in reporting one's data.
 - 2) It is expected that researchers will always be truthful and explicit in disclosing what was done, how it was done, and what results were obtained.
- b. Recognition of prior work.
 - 1) Research proposals, original research, and creative endeavors often build on one's own work and also on the work of others.
 - 2) Both published and unpublished work of others must always be properly credited.
- c. Confidentiality in peer review.
 - 1) The peer-review process involves the sharing of information for scholarly assessment on behalf of the larger disciplinary community.
 - 2) The integrity of this process depends on confidentiality until the information is released to the public.
 - 3) The contents of research proposals, of manuscripts submitted for publication, and of other scholarly documents under review should be considered privileged information, not to be shared with others.
- d. Disclosure of potential conflicts of interest.
 - 1) There is real or perceived conflict of interest when a researcher has material or personal interest that could compromise the integrity of the scholarship.
 - 2) It is imperative that potential conflicts of interest be considered and acted upon appropriately by the researcher.
- e. Compliance with institutional and sponsor requirements.
- f. Protection of human subjects and humane care of animals in conduct of research.
 - 1) Research techniques should not violate established ethics or federal and state requirements pertaining to the health, safety, privacy, and protection of human beings, or to the welfare of animal subjects.
- g. Collegiality in scholarly interactions and sharing of resources.
 - 1) Once results of research or creative activities have been published or otherwise communicated to the public, scholars are expected to share materials and information on methodologies with their colleagues according to the tradition of their discipline.
 - 2) Major professors have a particular responsibility to respect and protect the intellectual property rights of their advisees.
 - i. A clear understanding must be reached during the course of the project on who will be entitled to continue what part of the overall research program after the advisee leaves for an independent position.
 - ii. Major professors should also strive to protect junior scholars from abuses by others who have gained knowledge of the junior scholar's results during the mentoring process.
- h. Adherence to fair and open relationships between senior scholars and their co-workers.
 - 1) The relationship between senior scholars and their coworkers should be based on mutual respect, trust, honesty, fairness in the assignment of effort and credit, open communications, and accountability.
 - 2) The principles that will be used to establish authorship and ordering of authors on presentations of results must be communicated early and clearly to all co-workers.
 - 3) It is the responsibility of faculty to recognize and balance their dual roles as investigators and advisors in interacting with graduate students in their group, especially when a student's efforts do not contribute directly to the completion of his or her degree requirements.

4. Misconduct in Research and Creative Activities

- a. Federal and university policies define research misconduct to include:
 - 1) Fabrication (making up data and recording or reporting them)
 - 2) Falsification (manipulating research materials, equipment or processes, changing or omitting data such that the research is not accurately represented in the record)
 - 3) Plagiarism (appropriation of another person's ideas, processes, results, or words without giving appropriate credit)
- b. Misconduct does not include honest errors or honest differences of opinion in the interpretation or judgment of data.
- c. The university views misconduct to be the most egregious violation of standards of integrity and as grounds for disciplinary action, including the termination of employment of faculty and staff, dismissal of students and revocation of degrees.
- d. It is the responsibility of faculty, staff, and students to understand the university's policies on misconduct and to report perceived acts of misconduct of which they have direct knowledge and to protect the rights and privacy of individuals making such reports in good faith.
 - 1) MSU's Procedures Concerning Allegations of Misconduct in Research and Creative Activities can be found at: https://hr.msu.edu/policies-procedures/faculty-academic-staff/faculty-handbook/misconduct_procedures.html
 - 2) Research misconduct should be reported to MSU's Research Integrity Office using their anonymous misconduct hotline at <https://rio.msu.edu> or 1 (800) 763-0764.
- e. Graduate students should discuss authorship with their major professors prior to preparing their research for publication. General guidelines surrounding who qualifies as an author on a paper can be found at <https://rio.msu.edu/authorship>.
 - 1) Including an author without their permission or their approval of the final paper is a common form of authorship misconduct.
 - 2) Order of authors is also important for assigning credit and should be done fairly and with careful consideration of the disciplinary norms.
- f. Michigan State University needs to protect the security and integrity of its institutional data without hindering the effective and efficient use of those data. Researchers using data and records held by the University, in any form or medium, for the administration, operation, or governance of the University or any unit of the University must be aware of and comply with policies outlined in the MSU Institutional Data Policy available at <https://tech.msu.edu/about/guidelines-policies/msu-institutional-data-policy/>.

5. Research Involving Animal Subjects

- a. The use of vertebrate animals in research, teaching, and outreach activities is subject to state and federal laws and guidelines. University policy specifies that:
 - 1) All vertebrate animals under university care (involved in projects under the aegis or sponsorship of the university) will be treated humanely.
 - 2) Prior to their inception, all vertebrate animal projects receive approval by the Institutional Animal Care and Use Committee (IACUC; <http://animalcare.msu.edu/>).
 - 3) Michigan State University will comply with state and federal regulations regarding vertebrate animal use and care.
- b. University policy requires that all faculty, students and staff working with live vertebrate animals complete online tutorials (<https://animalcare.msu.edu/training/>) prior to conducting animal research.
- c. University policy requires that every project involving living vertebrates be reviewed for appropriateness by the IACUC before the use of these animals begins.
- d. Principal investigators or project directors must obtain approval from the IACUC before initiating any research, testing, or institutional project involving the use of vertebrate animals. Graduate students whose thesis or dissertation includes research involving vertebrate animals must provide

the graduate school with the approval number and a copy of the IACUC approval letter when they submit their thesis/dissertation.

- e. If a principal investigator or project director believes that a particular animal project does not need to be reviewed, the secretary of the IACUC should be contacted. There are several IACUC policies related to exemption (see <http://animalcare.msu.edu/>). Graduate students should request a letter from the IACUC that indicates approval of the exemption, which can be presented to the graduate school when the thesis/dissertation is submitted.

6. Research Involving Human Subjects

- a. As with the use of animals, any use of human subjects in research, including surveys, focus groups and interviews, must be approved by an institutional review board prior to the activity beginning (see <https://hrpp.msu.edu/>). Graduate students whose thesis/dissertation includes research involving human subjects must provide the graduate school with the approval number and a copy of the HRPP approval letter when they submit their theses/dissertation.

7. Office of Environmental Health & Safety (EHS) Regulations

- a. All personnel working in an environment where they could be exposed to radiation, chemicals, blood-borne pathogens, hazardous waste, infectious agents and/or recombinant DNA must receive introductory safety training offered on-line by EHS (<http://www.ehs.msu.edu>).
- b. Completion of these courses by MSU personnel, including graduate students, ensures that the university is fulfilling local, state, and federal requirements in radiation, chemical, biological, hazardous waste, and environmental safety.
- c. Training requirements will depend on specific job duties.
 - 1) Required for all laboratory employees engaging in the use of hazardous chemicals:
 - i. Chemical Hygiene and Laboratory Safety (one-time course)
 - ii. Hazardous Waste Refresher (required annually after completion of Chemical Hygiene and Laboratory Safety course)
 - iii. Security Awareness (one-time course)
 - 2) Required for all employees working with radiation:
 - i. Radiation Safety Initial (one-time course)
 - ii. Radiation Safety Refresher (required annually after completion of Radiation Safety Initial Course)
 - 3) Required for all employees with a reasonable anticipated risk of exposure to blood-borne pathogens/human blood/ bodily fluids:
 - i. Blood-borne Pathogen Initial (one-time course)
 - ii. Blood-borne Pathogen Refresher (required annually following completion of Blood-borne Pathogen Initial course)
 - 4) Required for all researchers working with infectious agents or recombinant DNA:
 - i. Biological Safety (one-time course)
 - 5) Required for all personnel whose job or coursework involves handling of live animals or handling animal-derived materials:
 - i. Biosafety Principles
 - ii. Biosafety Refresher (required annually following completion of Biosafety Principles initial course)
- d. For information as to what courses should be completed, talk to the laboratory PI and/or call EHS at 355-0153 for assistance.
- e. Graduate students must respond to emails from EHS indicating they need to complete refresher training. Failure to do so means that initial training must be completed again before research in the lab or on the farm can continue.

J. Student Safety

1. General Safety at MSU

- a. Up to date contact information and policies related to safety at MSU can be found at <https://msu.edu/state-transparency-reporting/campus-safety-information-resources>. This website provides phone numbers and addresses for campus police and the Title IX Office as well as information about safety and security services such as the Safe Ride program and how to anonymously and confidentially report crimes or misconduct.

2. Safety in the Classroom

- a. MSU is committed to clean and safe classrooms.
 - 1) For more information on how MSU has improved cleaning and disinfection in classrooms to reduce disease transmission visit: <https://remote.msu.edu/teaching/safety-guidelines.html>.
 - 2) Guidance on how to prepare for and be safe in the event of an active shooter situation can be found at: <https://comartsci.msu.edu/sites/default/files/documents/resources/safety-guidelines-for-active-shooter1.pdf>.

3. Protection from Relationship Violence and Sexual Misconduct

- a. MSU's Policy on Relationship Violence and Sexual Misconduct (RVSM) prohibits University community members from engaging in relationship violence, stalking, and sexual misconduct. The RVSM also describes the process for reporting violations of the policy, outlines the process used to investigate and adjudicate alleged violations of policy, and identifies resources available to members of the University community who experience relationship violence, stalking, or sexual misconduct. For more information, visit: <https://civilrights.msu.edu/policies/index.html>.

VII. STUDENT CONDUCT AND CONFLICT RESOLUTION

A. Rules Governing Personal Conduct

1. Violations of Rules

- a. Rules of personal conduct are intended to promote the orderly and efficient operation of the department and university, as well as to protect the rights of all involved. Violations, therefore, shall be regarded as cause for disciplinary action, up to and including dismissal. Dismissal may result from an accumulation of minor infractions as well as for a single serious infraction.
- b. The following are examples of conduct that are prohibited.
 - 1) Sexual harassment: may include, but is not limited to, sexual advances that are not welcomed, requests for sexual favors, and other verbal or physical conduct of a sexual nature or behaviors that create a hostile environment. Prohibited behaviors include:
 - i. Verbal harassment including, but not limited to, comments or questions about a person's sexual behavior, sexually oriented jokes, comments or questions about a person's body, and conversation filled with sexual innuendo.
 - ii. Physical harassment including, but not limited to, touching that is not welcomed, fondling, patting, pinching, or kissing.
 - iii. Direct or implied threat(s) that failure to cooperate with the request or advance will result in negative consequences.
 - iv. Sexually suggestive pictures or other sexually oriented objects which are displayed in the workplace which may have the purpose or effect of embarrassing, humiliating, intimidating, or frightening employees, students, clients, or visitors.
 - 2) Malicious destruction or willful neglect of university property
 - 3) Taking or attempting to take property from the department or university, its students, employees, visitors, or patrons.
 - 4) Failure to comply with safety rules and regulations:
 - i. Failure to immediately report all accidents and injuries.

- ii. Failure to comply with and (or) follow safety rules and regulations as established by the university's Department of Public Safety, and (or) EHS, and (or) the unit supervisor.
- 5) Canvassing and peddling
- i. Canvassing, peddling, and soliciting on the grounds and in the buildings of the university are forbidden. Collections among employees are approved by the university only for the United Way and campaigns originating from the Office of the Vice-President for University Development. Employees should refrain from taking orders or selling tickets or merchandise of any kind, or soliciting funds for any purpose, without the written approval from the Secretary of the Board of Trustees.
- 6) Other misconduct such as, but not limited to, the following:
- i. Consuming or possessing alcoholic beverages on university premises.
 - ii. Consuming or possessing controlled substances without a prescription on university premises.
 - iii. Unlawful manufacture, distribution, dispensation, possession, or use of illegal drugs or controlled substances.
 - iv. Being under the influence of alcohol when reporting to or while at work.
 - v. Being under the influence of controlled substances without a prescription, or illegal drugs when reporting to or while at work.
 - vi. Use of vulgar or obscene language.
 - vii. Threatening other persons, fighting, or instigating a fight.
 - viii. Verbally abusing, physically attacking, or obstructing a supervisor, co-worker, student, client, or visitor.
 - ix. Immoral conduct.
 - x. Illegal acts committed by employees when not at work that reflect adversely upon the university.
 - xi. Unauthorized use/possession of university or other property.
 - xii. Unauthorized possession of a weapon while on university property.
 - xiii. Ethnic intimidation based upon a person's race, color, religion, gender, or national origin.
 - xiv. Inappropriate computer use including, but not limited to, accessing illegal/obscene websites and downloading of copyrighted material.
- c. Academic misconduct
- 1) The Integrity of Scholarship and Grades policy at MSU defines academic misconduct as any one of the following: academic dishonesty, violations of professional standards, and falsification of academic or admission records. Graduate students (as students or TAs) share with the faculty instructor the responsibility for maintaining the integrity of scholarship, grades, and professional standards.
 - i. Examples of academic dishonesty include, but are not limited to: plagiarism, cheating on exams, and falsification of data.
 - ii. For details on various types of academic misconduct and the procedures to be used in instances of academic misconduct visit the Spartan Experiences Handbook at <https://spartanexperiences.msu.edu/about/handbook/regulations/student-group-regs-rulings-policies-ordinances/integrity-of-scholarship-and-grades.html>
 - 2) Students, faculty, staff and members of the general public may report alleged misconduct by students via the Office of Student Support and Accountability's online reporting tool at <https://ossa.msu.edu/academic-integrity>.
 - 3) Instructors may file an Academic Dishonesty Report if sanctions beyond a reduced grade in a course are sought. Graduate students can request a hearing to dispute an allegation by following the process outlined below in VII.B.1, and additional information can be found in or at the Ombudsperson's website: <https://ombud.msu.edu/resources-self-help/for-graduate-students/request-grievance-hearing>.

B. Graduate Student Grievance Procedure

1. Resolution for Concerns and Problems

- a. Students, faculty or staff can consult with the University Ombudsperson's office at any time. See VII.D for more information.
- b. Students or faculty with concerns or problems should seek resolution at the levels and in the sequence listed below.
 - 1) Complainants may seek the next level of consideration until concern is resolved or no higher level exists.
- c. Sequence and levels of resolution
 - 1) Student and faculty member should seek resolution of concerns by direct dialogue with each other.
 - 2) Consultation with the departmental graduate program director who will comment on the merit of the concern.
 - 3) Consultation with the department chair or designate.
 - 4) Appearance before department board for adjudication (DBA).
 - i. For details on the procedure, please refer to: Please visit <https://www.canr.msu.edu/ans/uploads/2017-files/ANS%20Revised%20Departmental%20Grievance%20Procedures%2006-30-17.pdf>
 - 5) College Graduate Hearing Board
 - i. The college has a judiciary composed of the chair of the college graduate committee or designee and equal number of faculty and graduate students in accordance with college bylaws.
 - 6) University Graduate Judiciary
 - i. The university has a judiciary composed of the Dean of the Graduate School or designee, who serves as chairperson, three elected faculty members of the University Graduate Council and three graduate students chosen by the All-University Graduate Student Governing Body.

C. Conflict of Interest

1. Integrity in Research and Creative Activities

- a. As per MSU's Office of Research Regulatory Support: "A conflict of interest occurs when an individual's personal, professional, commercial, or other interests or activities outside of the University affect, appear to affect, or have the potential to affect their professional judgment or obligation to the University." <https://coi.msu.edu/guidelines/faq.html>
- b. With respect to the integrity of the science being conducted, there can be real or perceived conflict of interest when a researcher has material or personal interest that could compromise the integrity of the scholarship. This makes it imperative that potential conflicts of interest be considered and acted upon appropriately by the researcher.

D. Office of University Ombudsperson

1. Description of Responsibilities

- a. The Office of the University Ombudsperson provides assistance to students, faculty, and staff in resolving University-related concerns. Such concerns include: student-faculty conflicts; communication problems; concerns about the university climate; and questions about what options are available for handling a problem according to Michigan State University policy.
- b. The University Ombudsperson also provides information about available resources and student/faculty rights and responsibilities. The office operates as a confidential, independent, and neutral resource. It does not provide notice to the University - that is, it does not speak or hear for the University.

2. Contact information

Office of the University Ombudsperson, 129 N. Kedzie Hall, (517) 353-8830; <https://ombud.msu.edu>

VIII. WORK RELATED POLICIES

A. Work Life Balance

1. Working Hours

- a. It is not the desire of the department to prescribe rigid working hours. However, it is imperative that the graduate student assumes the responsibility of adhering to whatever schedule is necessary to complete assigned duties and to assure timely completion of the degree requirements.
- b. It is expected that graduate students who are supported through an assistantship adhere to regular working hours in proportion to the degree of support and according to schedules worked out with their supervisors. It is the responsibility of the major professor to see that this obligation is fulfilled.
 - 1) A quarter-time graduate assistant is expected to provide 10 hours of service per week and a half-time graduate assistant is expected to provide 20 hours of service. The student should work with either their major professor or provider of the assistantship to clarify what type of work is expected.
 - 2) Thesis/dissertation research is not considered to be part of this time commitment nor is time spent in class or on coursework.
 - 3) Assistantships often start before and end after the course start and end dates. For example, in fall, assistantships typically begin on August 15 while classes do not start until the end of the month. Graduate students should clarify with their major professors or supervisors their work expectations for dates that fall outside the academic year.

2. Vacation

- a. Each student is encouraged to take two weeks of vacation per year.
- b. Vacations will be taken at the discretion of and through consultation with the major professor so as to maintain continuity of research and department activities.
 - i. Undergraduate breaks, such as fall or spring break cannot automatically be assumed to be breaks for graduate students.
 - ii. If you are paid to work over the summer, clarify with your major professor what the expectations are for your schedule during this time.
 - iii. Research schedules sometimes dictate work on evenings, weekends or over holidays. Clear communication with your major professor is essential to ensure that you are in agreement about when vacation is possible.
 - iv. Attendance at a scientific meeting is not typically considered vacation, but any additional days taken at the destination beyond the dates of the conference would be.

B. Health Services

1. MSU Student Health Insurance Plans

- a. Michigan State University (MSU) provides health coverage for graduate assistants (i.e., RA or TA) and their eligible dependents through Aetna. Graduate assistants are automatically enrolled in the health plan, and MSU pays the premium for this health coverage. Through the health plan, graduate assistants have access to quality health care through hospitals, physicians, and affiliated health care professionals in the Aetna provider network. To locate a provider through the Aetna network, visit: <https://www.aetna.com/individuals-families/find-a-doctor.html>.
- b. Graduate students not on assistantship (e.g., fellowships, scholarships or who are otherwise supported) are eligible to voluntarily enroll for health care insurance. For more information including costs and how to enroll, visit: <https://hr.msu.edu/benefits/stu-grad-asst/index.html>.

2. Dental and Vision Insurance Options

- a. Student dental plans and comprehensive vision insurance is also available for purchase by MSU graduate students. For more information including costs, benefit details, and how to enroll, visit: <https://hr.msu.edu/benefits/stu-grad-asst/index.html>.

C. Disability and Reasonable Accommodation

1. MSU Policy on Disability and Reasonable Accommodation

- a. As per the policy of Michigan State University, discrimination and harassment against a qualified individual with a disability is prohibited. The Policy describes the process for seeking reasonable accommodations to ensure equal employment opportunities and equal access to University programs, services, and facilities. For more details on the policy, visit: <https://civilrights.msu.edu/policies/disability-and-reasonable-accommodation-policy.html>

D. Grief Absence

1. Student Responsibility

- a. It is the responsibility of the graduate student to:
 - 1) notify their advisor/major professor and faculty of the courses in which they are enrolled of the need for a grief absence in a timely manner, but no later than one week from the student's initial knowledge of the situation,
 - 2) provide appropriate verification of the grief absence as specified by the advisor/major professor and faculty, and
 - 3) complete all missed work as determined in consultation with the advisor/major professor and faculty.

2. Advisor/Major Professor Responsibility

- a. It is the responsibility of the advisor/major professor to:
 - 1) determine with the student the expected period of absence – it is expected that some bereavement processes may be more extensive than others depending on individual circumstances,
 - 2) receive verification of the authenticity of a grief absence request upon the student's return, and
 - 3) make reasonable accommodations so that the student is not penalized due to a verified grief absence. If employed as a RA, TA or TE, the graduate student must also notify their employer. Both employer and student will swiftly communicate to determine how the student's responsibilities will be covered during their absence. Graduate teaching assistants (TAs) should refer to the bereavement policy in the MSU GEU CBU Article 18. Students who believe their rights under this policy have been violated should contact the University Ombudsperson.

E. Travel/Transportation

1. Parking Permits & Vehicle/Bicycle Registration

- a. All students, whether residing on or off campus, must register their vehicle with Parking Services if operating a vehicle on campus. For more information or to register or buy a permit visit: <https://parking.msu.edu/students>.
 - 1) Graduate students on assistantship or receiving a fellowship of more than \$1,000 per semester can purchase parking permits on a semester basis.
 - 2) Students without permits can park in pay-by-plate spaces available in lots at various locations around campus.
 - 3) Students on hourly pay for the summer semester need to call Parking Services (517-355-8440), and provide valid state-issued vehicle registration information, MSU ID, and a credit card and have access to the internet to complete the transaction.

- b. Bicycles, mopeds, and scooters used on campus must also be registered at through MSU's parking services portal at <https://parking.msu.edu/students>.

2. Authorization for Travel

- a. Authorization for travel must be submitted and approved before the travel occurs. This provides evidence that the traveler is on university business and may be critical in the event of an insurance claim, worker's compensation claim, or other litigation. The travel authorization process is completed on-line using the Concur system through the Travel @ State website (www.travel.msu.edu). Travelers must first create a travel profile. To request approval for a specific trip, a Concur Request must be submitted.
- b. The graduate program assistant (Karla Macelli) can assist with the request process, as well as with the post-travel procedures for requesting reimbursement of expenses.
- c. Be aware that travel reimbursement will be denied if the travel request has not been submitted and approved before the travel.

3. Driving University Owned Vehicles

- a. The university carries liability insurance on all university-owned vehicles when driven by authorized persons. Automobile Liability Insurance is essentially public liability and property damage insurance. It protects the driver and/or owner of an insured vehicle against charges filed by other persons, but it does not provide medical benefits for the driver or passengers.
- b. A Driver Certification form must be filled out and processed by staff in the main office before driving a university vehicle. The form can be found at <https://rmi.msu.edu/forms/index.html>.

4. Travel Accident Insurance

- a. Applies to all active full-time, part-time employees, members of the Board of Trustees, adjunct and clinical appointees, and graduate and undergraduate students or anyone else traveling on an authorized business trip for the University.
- b. University policy and regulations regarding student travel may be summarized as follows (See MSU Travel Regulations (<https://ctlr.msu.edu/manual-of-business-procedures/section-70>): Graduate students may be authorized to travel on university business and may be reimbursed for such travel. In addition, they may be assigned and may drive university vehicles on authorized trips. When driving university vehicles, they are protected by liability insurance but not medical coverage. Many students already have hospitalization and accident insurance of some sort. Students who travel for the university and who have dependents should be sure they are adequately insured.

5. Students Traveling Abroad

- a. Graduate students traveling internationally for MSU-related work (research data collection, international/professional conferences, courses, or other academic business) are strongly encouraged to sign up using the Global Travel Registry (<https://globalsafety.isp.msu.edu/faculty-and-staff/travel-registry/>), even if they are not being reimbursed for travel. This is the best way for MSU to stay in touch with our students if there is an emergency.
- b. When students appointed as TAs or RAs travel outside the U.S. to conduct required thesis or dissertation research or to collaborate with investigators conducting research abroad, the funding supporting the work will be required to pay for all needed vaccinations and or medications (e.g., anti-malarials) as determined by the MSU Travel Clinic (<https://travelclinic.msu.edu/>). Students may include those costs in applications for funds from the Research Enhancement or Travel Grant programs administered by the Graduate School (<https://grad.msu.edu/travel/>).
- c. Check with the MSU Travel Clinic. They will provide information related to health risks and immunizations (<https://travelclinic.msu.edu/>).
- d. Check the International Studies and Programs website for issues related to safety around the world (<https://isp.msu.edu/information-resources/international-travel>).

- e. Apply for assistance with travel funding via the graduate school (<https://grad.msu.edu/travel/>). If the graduate school provides funding, they will also provide a MEDEX emergency card.

6. Travel Funding

- a. Graduate students are encouraged to go to scientific meetings, and financial support for such professional travel may be available from major professors. Partial support for graduate student travel to present research is also available through various sources including the ANS Graduate Student Affairs and Curriculum Committee.
 - 1) Brief applications consisting of a budget covering travel, accommodation and registration along with an abstract of the work being presented must be submitted to the graduate program assistant (Karla Macelli) in early September for travel occurring from October to February or January for travel between March to September.
 - 2) Please contact the graduate program assistant (Karla Macelli) for more information on how to apply for graduate travel support, including exact deadlines.
 - 3) In return for departmental support, students are expected to present their research at the Animal Science Graduate Research Forum, held each October, or at the Research Rodeo in April.
- b. Other conference travel support is available through the Council for Graduate Students (COGS; <https://cogs.msu.edu/resources/funding/conference-award/>) and the MSU Graduate School (<https://grad.msu.edu/travel/>). Note that departmental and college approvals are required before submitting funding requests to the graduate school. Students should contact the Animal Science chairperson for assistance.

F. Jury Duty

1. General MSU Policy on Jury Duty

- a. The University recognizes the civic responsibility of employees, including graduate students, to serve on jury duty and makes provision for employees to perform such duty.
- b. The student must notify their major professor when they are called to jury duty as soon as notice is received and must provide proof of jury duty attendance and will continue to receive their regular stipend/pay. If jury duty lasts more than 2 weeks, the student will need to provide proof of this to their major professor as well as to the graduate program assistant and/or department human resources personnel.
- c. The student is expected to continue to report for regular University duty when temporarily excused from attendance at court.

2. Graduate Teaching Assistants

- a. A graduate student called for jury duty who is a TA at the time of service should refer to the policy in the current Graduate Employee Union contract available at: <https://geuatmsu.org/about/geu-contract/>.

G. Online Learning Management System

1. Desire2Learn (D2L) Brightspace

- a. D2L Brightspace is MSU's centrally-supported Learning Management System, providing the platform and tools for online content for all courses, including those taught in face-to-face, hybrid or fully online formats. D2L Brightspace tools allow access to course materials, collaboration, submission of assignments, online testing, grades, and other resources from a single interface.
- b. D2L Brightspace is available to all MSU students and faculty at <https://d2l.msu.edu>.
- c. For access to tutorials on how to use D2L as both a student in a course or as a TA, visit: <https://help.d2l.msu.edu/training>.

H. Miscellaneous

1. Use of Department Equipment

- a. No one, faculty or graduate student, should assume that any department equipment (e.g., computers, copiers, projectors, coffee pots, etc.) is available to them to use at any time for any purpose.
- b. Anyone interested in using any such equipment should check with main office or lab personnel. If you are unsure who to ask, please start with the main office or your major professor.

2. Keys

- a. Keys should be obtained from the main office (1290 Anthony).
- b. Any lost or misplaced keys should be reported to the main office immediately.

3. Office Supplies

- a. Graduate students should obtain their office supplies (paper, pencils, note pads, pens, etc.) from their major professor's office.
- b. The department will NOT assume the responsibility of providing supplies for personal use (i.e., use at home, class work needs, etc.).

4. Purchasing Supplies

- a. Spartan Marketplace – ordering is online. Please obtain instructions from your major professor, laboratory technician, or personnel in the main office. An account number will be needed, unless this is a personal purchase. After items are received, please check and make sure that they are all there and undamaged. Please call University Stores if items are missing or damaged.
- b. Purchase requisitions submitted through the EBS system; please check with main office personnel for procedure.
- c. Some items may be purchased using a University PCARD. Please check with your major professor, laboratory technician, or personnel in the main office for details.

5. Room Scheduling

- a. Department conference rooms are reserved through the main office (1290) of the Department of Animal Science.
 - 1) Conference Room 1310 will seat approximately 75, Conference Room 1240 will seat approximately 55, and Conference Room 2209K will seat approximately 10.
 - 2) The Al Pearson Reading Room (3285 Anthony), is available for individual or small group use and is accessible using MSU ID card access. This room may be reserved for larger group meetings through the main office.
 - 3) No regularly scheduled classes are to be held in conference rooms.
 - 4) Department of Animal Science has first priority for scheduling these rooms.
 - 5) Coffee pots must be checked out from the main office.
 - 6) Non-Animal Science groups will be charged a rate of \$50. Cost of any additional cleanup will be charged back to the group that reserved the room.
 - 7) Outside non-animal agriculture groups cannot book these rooms for more than a month in advance and not for longer than one day in length.

6. Graduate Student Desk Assignments

- a. Main office personnel in consultation with the graduate program director and department chair make graduate student desk assignments. An attempt is made to provide desk space for all graduate students in close proximity to their lab and/or major professor. Requests to change office assignments should be submitted to the graduate program director.

7. Locker Rooms

- a. There are faculty and staff locker rooms located on the first floor (men) and in the basement (men and women). If you would like to store your items in a locker (you provide the lock), you must inform the main office and you will be assigned a locker.

8. Storage

- a. There are several storage rooms in the building. You must check with the main office if you wish to store items in a particular storeroom.

9. Laboratory Safety

- a. All new personnel working in an environment where he/she could be exposed to radiation, chemicals, blood-borne pathogens, hazardous waste, infectious agents and/or recombinant DNA must attend the introductory safety training sessions that are offered online by the Office for Environmental Health and Safety (EHS). Information on this and other training offered by EHS is available on the EHS web site (<https://www.ehs.msu.edu>), Federal law mandates this training, and the university must assure that all personnel handling radiation, chemicals, biological materials and/or recombinant DNA comply.
- b. Graduate students must discuss what training they need with their major professors. See VI.I.7 for more information

10. Use of Laboratory Facilities by Guests

- a. The goal is to promote efficiency in the use of laboratory equipment and expertise in the Department of Animal Science. This will require collegiality amongst faculty and graduate students.
- b. Plan ahead if you need to work in someone else's laboratory or use shared equipment.
- c. Consult with the laboratory principal investigator (PI).
 - 1) Communication between the major professor and laboratory PI is advised.
 - 2) Involve the PI of the laboratory in the INITIAL planning of the experiment. Experimental protocols should be written and available.
 - 3) If PI is not involved in initial planning, then consult with the PI BEFORE the experiment is started. The ability to measure something does not justify its inclusion in an experimental protocol.
 - 4) Problems with samples include too many samples, too few samples, or submission of samples at the wrong time. PIs frequently can save you time and money with appropriate sampling schemes.
- d. Considerate use of a laboratory facility involves:
 - 1) Setting a schedule and communicating changes in schedule.
 - 2) Being sure you know how to run equipment and perform assays (coordinate with people who do know).
 - 3) Paying for reagents and disposable supplies consumed.
 - 4) Paying for breakage.
 - 5) Extensive use of equipment may require sharing of maintenance contracts.
 - 6) Costs involved must be agreed upon before use of laboratory begins.
 - 7) Cleaning up after yourself. Disposing of waste properly.
- e. Isotopes
 - 1) EHS training is mandatory before working with radioactive substances.
 - 2) PIs are responsible for assurance that laboratories are not contaminated.
 - 3) Survey of areas must be completed after each use of isotope.
- f. Ultra-cold freezers – minimize exposure time to room temperature when moving samples, especially those of the PI that owns the freezer.
- g. Extensive use of PI's expertise may warrant co-authorship.
- h. Remember, if you are a guest in another's laboratory, courtesy is critical for cooperation.

11. Licensed Drugs

- a. Researchers within the Department of Animal Science must have his or her own individual State of Michigan research license and the DEA research registration to obtain Schedule II, III, IIIN, and IV controlled substances. Environmental Health and Safety (EHS) has developed resources, which are available to aid in this process at this website: <https://ehs.msu.edu/lab-clinic/cont-sub/index.html>

I. Emergency Situations

1. Evacuation Procedures

- a. Please be familiar with the evacuation procedures for all emergencies. Emergency procedures for Anthony Hall are posted throughout the building.

IX. DEPARTMENTAL ORGANIZATION

A. Faculty

1. List of faculty

- a. Animal Science website at <http://www.canr.msu.edu/ans/people/faculty>

B. Animal Science Resource People

1. Department Administration and Current Graduate Committee Members

- a. Dr. Cathy Ernst, Chairperson; 1290F Anthony; 432-1941; ernstc@msu.edu
- b. Dr. Janice Siegford, Graduate Student Program Director; 3270K Anthony; 432-1388; siegford@msu.edu
- c. Karla Macelli, Graduate Student Program Assistant; 1290 Anthony; 355-8417; macellik@msu.edu
- d. Sandy Bailey, ANS Fiscal Officer; 1290H Anthony; 355-8430; skibo@msu.edu
- e. Dr. Brian Nielsen, Graduate Committee Chair, 1287D Anthony; 432-1378; bdn@msu.edu
- f. Dr. Jose Cibelli, Graduate Committee Member, 1230D Anthony; 432-9206; cibelli@msu.edu
- g. Dr. Augusto Madureira, Graduate Committee Member, 1205I Anthony; 353-5102; madurei2@msu.edu
- h. Mariah Jansen, Graduate Student Representative for the Animal Science Graduate Student Association (ASGSA); 2240 Anthony; jansenm2@msu.edu

C. Department Committees with Graduate Student Representation

1. Department Advisory Committee (DAC)

- a. Composition of the committee consists of five members elected from the regular faculty of the department and a department staff person. The department chairperson, associate chairpersons and undergraduate coordinator serve as non-voting ex-officio members. Student representation consists of one undergraduate and one graduate student. Student members are not present when faculty benefits, appointments, promotions, tenure, dismissals, and any matters affecting the professional responsibility of the faculty are discussed.
- b. Functions of the DAC:
 - 1) Serve as an open channel of communication between the Department of Animal Science faculty, staff, students, and the department chairperson.
 - 2) Advise the department chairperson in the discharge of his/her other responsibilities by a direct representation of faculty and student opinion.
 - 3) Prepare, in cooperation with the department chairperson, the agenda and make all necessary arrangements for the department meetings.
 - 4) Be responsible for the supervision and conduct of department faculty nominations and elections.

5) Receive grievances and set-up grievance procedures.

2. Undergraduate Student Affairs and Curriculum Committee (USACC)

- a. Composition of the Undergraduate Student Affairs and Curriculum Committee consists of four elected faculty members, at least one of which has a half-time, or more, appointment in extension, one graduate student, and two undergraduate students. In addition, the undergraduate student program coordinator shall serve as a non-voting, ex-officio member of the committee.
- b. Functions of the USACC:
 - 1) Review and evaluate courses, curricula, and degree requirements for undergraduate students. It shall take leadership in considering the establishment and deletion of courses and curricula. The committee shall present to the department faculty those curriculum matters which it deems appropriate for discussion and/or action.
 - 2) Review and make recommendations to the department on matters relative to advising undergraduate students.
 - 3) Receive complaints made by undergraduate students relative to classroom instruction. The student may take any complaint relative to instruction directly to the department chairperson. If the chairperson is unable to resolve the matter to the student's satisfaction, the chairperson shall refer the unresolved complaints in writing to the Undergraduate Student Affairs and Curriculum Committee. A hearing shall be scheduled within 10 working days involving the student, faculty, or staff member and Undergraduate Student Affairs and Curriculum Committee. A written report of the action or recommendations of the committee will be forwarded to the dean, chairperson, instructional staff member, student, and university ombudsperson within 10 working days of the adjournment of the hearing committee. Students wishing to appeal a departmental action or recommendation may do so as outlined in provisions 2.2.8.1. of the Academic Freedom Report.

3. Graduate Student Affairs and Curriculum Committee (GSACC)

- a. The Graduate Student Affairs and Curriculum Committee is composed of three elected faculty members and one graduate student. In addition, the graduate student program director shall serve as a non-voting, ex-officio member of the committee.
- b. Functions of the GSACC:
 - 1) Develop and oversee graduate curriculum and program.
 - 2) Implement policies and requirements concerning graduate student affairs established by the university, college, and department.
 - 3) Act as advisory committee to the department chairperson and to the graduate student program director.
 - 4) Determine graduate student award recipients.

D. Graduate Student Organizations

1. Animal Science Graduate Student Association (ASGSA)

- a. The ASGSA is open to all MSU graduate students registered in the Department of Animal Science. The objectives of the organization are to:
 - 1) Establish communication among graduate students and create channels of communication with the faculty and other parts of the university.
 - 2) Promote the academic, economic, and social aspects of both the Department of Animal Science and its graduate students. ASGSA has business meetings once a month and sponsors a variety of social and professional activities over the course of the year.

2. Council of Graduate Students (COGS)

- a. COGS is the official graduate student organization at Michigan State University. Officers and department representatives (one representative per department across the entire university) are voting members. COGS primary objective is improvement of the academic, social, and economic position of graduate students at MSU. The organization has official delegates to the Graduate

Council, the Academic Council, and standing committees thereof, and several all-university and presidential committees. Through membership in these other bodies, COGS participates in decisions on such matters as tuition and fees, the grading system, traffic regulations, academic and extracurricular programs of the university, graduate assistant stipends, improvements in on- and off-campus student living conditions, academic freedom and responsibilities, student representation in university government, and the selection of principal administrative officers. Meetings are open to all graduate students. For further information, contact the graduate program director for the name of your representative.

X. UNIVERSITY RESOURCES

This section provides a list of university resources available to all graduate students with particular attention to those that apply to graduate students in the Department of Animal Science.

A. University-Level Resources

1. Resources provided by university-level units at MSU

- a. MSU Academic Calendar: <https://reg.msu.edu/ROInfo/Calendar/Academic.aspx>
- b. Office for International Students and Scholars: <https://oiss.isp.msu.edu/>
- c. Resource Center for Persons with Disabilities: <https://www.rcpd.msu.edu/>
- d. Office of Spartan Experiences: <https://spartanexperiences.msu.edu/index.html>
- e. Michigan State University Libraries: <https://lib.msu.edu/>
- f. Olin Health Center for Students: <https://olin.msu.edu/>
- g. Institutional Diversity and Inclusion: <https://inclusion.msu.edu/>
- h. The Burgess Institute for Entrepreneurship and Innovation: <https://entrepreneurship.msu.edu/>
- i. The Writing Center: <https://writing.msu.edu/>
- j. University Outreach and Engagement: <https://engage.msu.edu/>
- k. The Ombudsperson's Office: <https://ombud.msu.edu/>
- l. MSU Council of Graduate Students: <https://cogs.msu.edu>
- m. MSU Academic Program Catalog and Course Descriptions: <https://reg.msu.edu/>
- n. Technology at MSU: <https://tech.msu.edu>
- o. Campus Safety Information and Resources: <https://msu.edu/state-transparency-reporting/campus-safety-information-resources>

2. Resources provided by the Student Life & Engagement Division

- a. Student Parent Resource Center: <https://studentparents.msu.edu/>
- b. Gender and Sexuality Campus Center: <https://gscc.msu.edu/>
- c. Student Veterans Resource Center: <https://veterans.msu.edu/>
- d. Women's Student Services: <https://wss.msu.edu/>

B. Graduate School Resources

1. Resources provided by the MSU Graduate School

- a. Career development: <https://grad.msu.edu/gradcareerdevelopment>
- b. Diversity, equity, & inclusion programs: <https://grad.msu.edu/diversity>
- c. Events and workshops via MSU Graduate School calendar: <https://grad.msu.edu/calendar>
- d. Graduate school forms: <https://grad.msu.edu/forms>
- e. Overview of graduate funding types and opportunities: <https://grad.msu.edu/funding>
- f. Graduate Educator Advancement and Teaching (GREAT): <https://grad.msu.edu/great>

- g. Graduate School Office of Well-being: <https://grad.msu.edu/GROW>
- h. Mentoring: <https://grad.msu.edu/optimizing-mentoring>
- i. Out-of-state tuition waivers: <https://grad.msu.edu/out-state-tuition-waiver-external-fellowships-traineeships-and-internships>
- j. General graduate student policies and procedures: <https://grad.msu.edu/policies-and-procedures>
- k. Professional development: <https://grad.msu.edu/professional-development>
- l. Research integrity: <https://grad.msu.edu/researchintegrity>
- m. Graduate Teaching Assistant Preparation (GTAP) Program: <https://grad.msu.edu/gtap>
- n. Traveling Scholar opportunities: <https://grad.msu.edu/traveling-scholar>
- o. University Committee on Graduate Studies: <https://grad.msu.edu/UCGS>

C. College- and Department-Level Resources

1. Resources provided by the College of Agriculture and Natural Resources

- a. CANR graduate student page: <https://www.canr.msu.edu/academics/graduate/>
- b. CANR graduate degree programs: https://www.canr.msu.edu/academics/graduate/graduate_programs/
- c. CANR graduate dual degree, specialization, and certificate programs: https://www.canr.msu.edu/academics/graduate/graduate_teaching_certificate/
- d. Resources for current CANR graduate students: https://www.canr.msu.edu/academics/graduate/current_students/
- e. Resources for new or incoming CANR graduate students: https://www.canr.msu.edu/academics/graduate/resources_and_events/
- f. CANR Graduate Committee: https://www.canr.msu.edu/academics/graduate/graduate_committee/

2. Resources provided by the Department of Animal Sciences (ANS)

- a. Department of Animal Science: <https://www.canr.msu.edu/ans/>
- b. ANS Graduate Student Program: https://www.canr.msu.edu/ans/students/graduate_program/
- c. ANS Graduate Awards: https://www.canr.msu.edu/ans/students/graduate_program/ANS-Graduate-Awards/
- d. Graduate Student Associations (ASGSA and COGS): https://www.canr.msu.edu/ans/students/graduate_program/graduate_student_organizations
- e. ANS Graduate Research Forum: https://www.canr.msu.edu/ans/students/graduate_program/ans-graduate-research-forum/
- f. ANS Graduate Research Rodeo: https://www.canr.msu.edu/ans/students/graduate_program/graduate-research-rodeo