

Animal Science Graduate Handbook

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Updated Fall 2024

Table of Contents

New Graduate Student Onboarding Checklist	3
Introduction	4
Departmental Information	4
University Information	4
City of Ames Information	4
ISSO	4
Checklist Information	5-7
English Requirements	8
Professional and Departmental Organizations	8
Department Policies & Expectations	9-13
Major Professor and Home Department	9
Assistantships, Stipends, Tuition and Financial Aid	9
Working Hours and Time Off	10
Teaching Opportunities and Expectations	10
Student Grievance Procedures	11-12
Termination of Assistantship Appointments	13
Policy for Arrival of New Children	14-16
Making Progress Toward a Degree	17-24
Academic Plan and Committee (APC)	17-18
Transfer Credits	18
Changes in Degree Programs	18-19
Required Course Work and Credit Load	19
Program Learning Goals	19
Thesis/Creative Component/Dissertation	20
Combined BS-MS Degree Program	20
Expectations for Progress	20-21
Academic Probation and Dismissal	21
Preliminary Examination	22-23
Final Examination	23-24
Degree Requirements	25-31
Animal Breeding and Genetics	25-26
Animal Physiology	27-28
Animal Science	29
Meat Science	30-31
Appendix – Forms	32

New Graduate Student Onboarding Checklist

[NEW GRAD STUDENT CHECKLIST FROM THE GRADUATE COLLEGE](#) [ISU STUDENT RESOURCES](#)

[Sign-On Dashboard \(the dashboard that allows you to conveniently access all your applications in one place\)](#)

***International Students – Check in with ISSO (International Students & Scholars Office)

- 4530 Memorial Union – 515-294-1120 – isso@iastate.edu
- <https://isso.dso.iastate.edu/> and [International Graduate Student Pre-Arrival Guide](#)

Visit the Student Technology Page: <https://www.it.iastate.edu/student-tech>

On-Campus Parking Info: <https://www.parking.iastate.edu/>

Get your ISU Student Identification Card:

- ISUCard Office - <https://www.isucard.iastate.edu/> - 515-294-2727 – 0530 Beardshear Hall
- You will need a state or federal issued photo ID and your UID# or SSN - for more information visit: <https://www.isucard.iastate.edu/first-card-requirements>

Check in with your Major Professor and register for classes:

- Communicate with your professor to discuss program and course requirements
- Check Workday inbox notifications to make sure you have taken care of all onboarding tasks and holds
- Register for classes through Workday - [Registration Overview](#) - [Demo Video](#)
- Obtain office and/or lab room assignment
- Major professor completes and signs key request form: <https://iastate.app.box.com/file/269525384879>
- Organize IT (VPN, printer, phones, etc.) – anshelp@iastate.edu – 515-294-5149

Animal Science Front Office - 1221 Kildee Hall:

- Meet the administrative team
- Contact Michelle Hiscocks to get your picture taken for the online directory - michhisc@iastate.edu
- Submit your key request form
- This will take 1-2 days to process, you will then be given a signature form
- Student signs form @ FPM in 108 General Services Building, after correct keys are received

For those on assistantship:

- Sign your Letter of Intent (LOI) in Workday (if not done prior to arrival)
- Complete your I-9 at the UHR Service Center (3810 Beardshear Hall – 515-294-4800) for U.S. citizens or at the ISSO Office (4530 Memorial Union – 515-294-1120) for international students

Additional Student Resources for Navigating Workday:

[Workday Student: Do This First \(Graduate Students\)](#)

[Graduate Student How-To Articles for Various Workday Processes](#)

Other questions? Contact Rose Mary Ross – Grad Student Services - rmross@iastate.edu

Introduction

This handbook was developed specifically to guide animal science graduate students through their student careers at Iowa State University. The information presented here is intended to assist graduate students and faculty in meeting the requirements and deadlines encountered in the normal progress towards a graduate degree. For questions that are not addressed in this handbook, more comprehensive information is available online.

Departmental Information

Department of Animal Science website: <https://www.ans.iastate.edu>

Animal Science Graduate Programs: <https://www.ans.iastate.edu/graduate-programs>

Graduate College

- Homepage: www.grad-college.iastate.edu
- Thesis Information: www.grad-college.iastate.edu/current/thesis
- Graduate College Handbook: <http://www.grad-college.iastate.edu/handbook/>
- Center for Communication Excellence - <https://cce.grad-college.iastate.edu/>

Iowa State University

- Office of Human Resource Services: <https://hr.iastate.edu/>
- Student & Scholar Health Insurance Program (SSHIP) - <https://sship.hr.iastate.edu/>
- Health Care - Thielen Student Health Center: www.health.iastate.edu
- Office of Student Financial Aid – <https://www.financialaid.iastate.edu/>
- Department of Residence - <https://www.housing.iastate.edu/halls-and-apartments/>
- Dining Services - <https://www.dining.iastate.edu/>
- Campus Map - <http://www.fpm.iastate.edu/maps>
- Course Catalog – <https://catalog.iastate.edu/>
- Student Organizations & Clubs: <https://www.stuorg.iastate.edu/organizations/28/type>
- Student Accessibility Resources: <https://sas.dso.iastate.edu/>
- Student Legal Services: <https://www.studentlegal.dso.iastate.edu/>
- Student Counseling Service: <https://www.counseling.iastate.edu/>
- Graduate & Professional Student Senate <http://www.gpss.iastate.edu/>

City of Ames

Information about the Ames community is available at www.cityofames.org and at <https://www.ameschamber.com/>.
CyRide (Ames public transportation system): <https://www.cyride.com/> or 515-292-1100

International Students & Scholars

The International Students & Scholars Office (ISSO) **should be your very first stop on campus**. Staff in the ISSO will advise you on legal requirements relating to your visa, your employment at ISU, and your overall status as an international graduate student. It is vitally important that you remain in contact with ISSO during your study at ISU, and that you advise the ISSO staff of anything that might affect your enrollment status or the status of your visa.

- Obtain a temporary Social Security Number and instructions to obtain your permanent Social Security Number. Temporary Social Security Number is needed to obtain ISU Card.
- Fully complete the Form I-9 process in Workday

Contact Information:

International Students & Scholars Office - ISSO

4530 Memorial Union

515-294-1120

isso@iastate.edu

Check in with Major Professor

- Obtain office and/or laboratory room assignment
- Major Professor completes and signs Key Request Form
- Submit form to the Animal Science administrative office in 1221 Kildee Hall
- NOTE: *Upon graduation/separation of position, all keys are to be turned in at 1221 Kildee Hall. A fee will be assessed for all lost or non-returned keys.*

Meet the Animal Science Administrative Team in 1221 Kildee Hall

- Submit your key request form
- This will take 1-2 days to process, you will then be given a signature form
- Student signs form @ FPM in 108 General Services Building, after correct keys are received
- Schedule a time for your photograph to be taken for the online directory

Registering for Classes

- Discuss program and course requirement with major professor – recommended courses will vary depending on academic program and background.
- Schedule of Classes: <http://classes.iastate.edu/> (be sure to select correct term)
- Register for classes in Workday through your Academics Dashboard

Questions specific to your major program should be directed to the Director of Graduate Education (DOGE) for your major. There is a designated faculty member that serves as DOGE for each graduate major.

DOGE list: <https://www.grad-college.iastate.edu/doge/>

Department of Animal Science – Graduate Student Orientation Course

The Department of Animal Science has a required course for orientation to the department and programs available to graduate students. Animal Science 5010 is required for all students in the 4 majors of the Department of Animal Science. The course meets in the fall semester on Mondays at 1:10 pm.

Assistantship Recipients

- Log in to Workday – www.workday.iastate.edu
- Review and accept your **Letter of Intent (LOI)**, your contract with the department, in Workday
- Follow all onboarding Workday prompts that appear in your inbox
- Completing the Form I-9 needs to occur within the first 3 days of your employment
- NOTE: ISU does not mail out payroll checks; please enroll for direct deposit. Your payroll information for each pay period will be available in Workday.

Contact Information:

University Human Resources Office
3810 Beardshear Hall
515-294-8226 or 877-477-7485
hrshelp@iastate.edu

Student Identification Cards

- Go to ISU Card Office - www.isucard.iastate.edu

NOTE to International Students: You **must** obtain a temporary social security number from International Students & Scholars Office (ISSO) **before** you apply for an ISUCard.

Contact Information:

ISU Card Office
0530 Beardshear Hall
515-294-2727
idcard@iastate.edu

ISU Information Technology (IT) Services / IT Solution Center

The IT Solution Center is your number one on-campus and online resource for technology assistance, from registering your devices to resetting your password: www.it.iastate.edu/newstudent

Contact Information:

Information Technology Services
271 Durham Center

IT Solution Center
515-294-4000
192 Parks Library
solution@iastate.edu

Animal Science Department IT Resources

<https://www.ans.iastate.edu/ans-it>

Contact Information:

Animal Science IT
515-294-5149
anshelp@iastate.edu

Parking

Park & Ride (free): <https://www.parking.iastate.edu/park-and-ride>
Commuter Lot permits: <https://www.parking.iastate.edu/commuter>
Meters and Pre Pay Parking: <https://www.parking.iastate.edu/meters>

Contact Information:

ISU Parking Division
27 Armory Building
515-294-3388
<https://www.parking.iastate.edu/>

Graduate College Information

The Graduate College website is a very valuable resource (<https://www.grad-college.iastate.edu/>). You will find the Graduate College Handbook and other helpful information that may be useful as you start your program at Iowa State. There is also a link here to the forms you will need during your course of study, deadlines, etc. Please become familiar with the information available from the Graduate College website. Perhaps the most valuable resource you will find as a graduate student is the Graduate College Handbook. The handbook is very thorough and easy to use. You can learn about the requirements for your Academic Plan, procedures for exams, and necessary steps in completing your degree (<https://www.grad-college.iastate.edu/handbook/>).

The Graduate and Professional Student Senate (**GPSS**) <https://www.gpss.iastate.edu/> is an elected governing body through which graduate and professional students express their concern for the welfare of graduate and professional students at Iowa State University, develop and disseminate ideas for the improvement of graduate and professional education, and contribute to the formation of relevant University policies. Founded in 1970, it is the recognized independent representative body of graduate students at ISU; it is charged with representing the graduate and professional students' perspective on campus issues and serving as a liaison between graduate/professional students, the university administration, and the Board of Regents.

The ISU Center for Excellence in Learning and Teaching (**CELT**) also offers new teaching assistants a fall training seminar in August and a spring training seminar in January. Check the website for more details:
<https://www.celt.iastate.edu/>

Health and Dental Insurance

All graduate students without an assistantship who are registered for 5 credit hours or more at Iowa State University, are eligible to enroll in the ISU Student & Scholar Health Insurance Program (SSHIP) <https://sship.hr.iastate.edu/>. Graduate assistants receive single student health insurance coverage free-of-charge as part of the terms of their appointments and may choose to enroll spouses and children in the plan for an additional premium. Informational packets about the insurance program are normally mailed out the first week of August. Enrollment is automatic for assistants; however, students who do not hold assistantships, spouses, and children must be enrolled by the established deadline. See the program website for more information. Non-immigrant international students and their dependents must be enrolled in the health insurance program. Dental insurance coverage is also available. More detailed information for graduate assistants can be found here: <https://sship.hr.iastate.edu/graduate-assistants>.

For more information on health services, locations and contact persons visit following websites: <https://www.grad-college.iastate.edu/resources/health/>, <https://sship.hr.iastate.edu/contact-us>.

Contact Information:

University Human Resources
Student & Scholar Health Insurance Program (SSHIP)
3810 Beardshear Hall
515-294-4800
<https://sship.hr.iastate.edu/>
isusship@iastate.edu

Laboratory Procedures & Safety Training

All students and staff who work in laboratories at ISU must undergo laboratory procedures and safety training administered by the ISU Environmental Health & Safety (EH&S) office. Before you begin lab work, please contact your major professor and the departmental chemical hygiene officer to obtain the schedule for EH&S training sessions relevant to your needs. Some sessions may be completed on-line via the EH&S training website <https://www.ehs.iastate.edu/safety-training> while others require personal attendance. You are required to take a basic introductory laboratory safety course as part of Animal Science 5010.

Institutional Animal Care and Use Committee (IACUC) Training

All activities involving the use of vertebrate animals must be approved by the IACUC prior to use of the animal in research or teaching. Contact your major professor to determine if training is required. You will be required to complete an online training course as part of Animal Science 5010.

First Report of Injury

All accidents, incidents and injuries occurring at Iowa State during the course of university-related employment must be reported to your major professor as soon as possible, even if no medical attention is required. Report all accidents, incidents and injuries online as soon as possible (Emergencies: Dial 911):
<https://www.riskmanagement.iastate.edu/Report>.

Contact Information:

Office of Risk Management (ORM)
1700 Administrative Services Building
515-294-7711
For 24-hour URGENT risk management assistance: 515-294-7700
orm@iastate.edu

Graduate English Requirements for Nonnative Speakers of English (per ISU Graduate College Handbook 4.4.3).

Graduate students whose native language is not English and who do not have a bachelor's or advanced degree from ISU or a U.S. institution, or do not meet the TOEFL or IELTS exemption score range, must take the English Placement Test at the beginning of their first semester of enrollment. This test is administered by the Department of English. It must be taken in addition to TOEFL (Test of English as a Foreign Language), which is taken as part of the admissions process. A student who does not pass this examination is assigned to one or more courses in the English 990 and 1010 series. This coursework must be completed during the first year of study. Registration holds are placed on the student's account if the student does not register for these classes during the first year of study. (There is a developmental course fee for the English 990 course.)

A graduate student whose native language is not English may be automatically exempted, please refer to details in Chapter 4.4.3 for more details: <https://www.grad-college.iastate.edu/handbook/chapter4-degrees>

Oral English Certification Test

The Oral English Certification Test (OECT) is an academic test required for international teaching assistants (ITAs), i.e. graduate students who fit **both** of these categories: international graduate students who are not native speakers of American English (i.e., learned another language first), and international graduate students who are appointed to a teaching assistantship.

The OECT is administered before the beginning of fall and spring semesters for first-time test-takers, as well as at the end of these semesters for ITAs re-taking the test. The OECT testing dates can be found on the [OECT website](#). Registration for the OECT can be completed online through the program's website two to three weeks before the testing dates. International Teaching Assistants (ITAs) and faculty with questions about OECT should email itas@iastate.edu.

A prospective ITA who does not pass OECT is required to successfully complete GRST 5400 coursework and be retested. The [GRST 5400 is a series of oral communication courses](#) designed to help ITAs improve their English-speaking skills by focusing on pronunciation, listening, classroom-communication strategies, question-handling, teaching and lecturing skills, and the culture of U.S. university life. Because enrollment is restricted, ITAs cannot register for GRST 5400 courses. ITAs must contact the Center for Communication Excellence (CCE) in the Graduate College upon receiving the OECT scores to obtain permission to enter the course.

Professional & Departmental Organizations

Students may elect to join one or more professional organizations, depending on specific areas of interest. All of the following professional organizations encourage student membership.

- American Dairy Science Association (ADSA)
- American Meat Science Association (AMSA)
- American Society of Animal Science (ASAS)
- Poultry Science Association (PSA)
- Institute of Food Technologist (IFT)

Graduate students in animal science are also encouraged to become involved in the departmental clubs that are active in various special interest areas. These include the following:

- Association of Graduate Animal Scientists (AGAS)
- Animal Breeding and Genetics Graduate Student Organization (ABGGSO)
- Meat Science Club

In addition, the Graduate and Professional Student Senate (GPSS) provides an avenue for student involvement in issues at the university level. The Department of Animal Science has two GPSS senators, who are elected by the AGAS.

For more information, contact the DOGE, Dr. Nicholas Gabler, ngabler@iastate.edu.

Departmental Policies & Expectations

Establishing a Major Professor/Faculty Advisor

Animal Science does not accept graduate students without a faculty member indicating a willingness to serve as major professor. However, selecting a major professor is a very important decision for your graduate career because this person will be your advisor, mentor, and supervisor for the duration of your graduate study. The research problem that becomes your thesis or creative component will depend upon your major professor's interests, funding, and laboratory facilities. In selecting, it is recommended that you review faculty areas of expertise at our website <https://www.ans.iastate.edu/people/faculty> and contact faculty prior to applying.

If you are entering as a new student, and have questions about your major professor, please contact Dr. Nicholas Gabler, Director of Graduate Education (DOGE), ngabler@iastate.edu.

Graduate students who wish to change or replace major professors should first consult with the DOGE. He will confer with the faculty involved to facilitate the change within the limits of assistantship obligations and commitments.

Students in Interdepartmental Majors

Students admitted to interdepartmental majors will have a different DOGE than the students in the four Animal Science majors. Refer to the DOGE List: <https://www.grad-college.iastate.edu/resources/contacts/doge-list>

Assistantship Appointments – Terms and Expectations

As one of the chief methods of financial support for graduate students, the department provides a limited number of graduate assistantships, most of which are affiliated with individual faculty or research programs. Most assistantships are supported by research funding and are usually offered to graduate applicants when an admission offer is made.

Students who are qualified and who receive a graduate assistantship appointment are most often appointed to a research assistantship (RA). The Department of Animal Science has relatively few teaching assistantships (TA) or administrative assistantships (AA). Only students granted "full" or "provisional" admission status are eligible for assistantships. The typical terms for assistantship appointments include half-time employment (20 hours of work weekly) for twelve months, although quarter-time (10 hours weekly) and three-quarter-time (30 hours weekly) appointments are sometimes made under specific circumstances.

Annual Reports

All graduate students in the Animal Science majors (Animal Breeding and Genetics, Animal Physiology, Animal Science, and Meat Science) are required to submit an annual report of progress to the DOGE by April 1 of each year. The report is to be first submitted to the major professor by March 15. After discussion of the report, both the student and the major professor sign the report to be sent to the DOGE by April 1. The DOGE will provide the form.

Stipends and Tuition Scholarships

Monthly stipends and a percentage of tuition scholarship are given to graduate assistants. For specific details contact Rose Mary Ross rmross@iastate.edu. For additional information on assistantship policies and procedures, see the ISU Graduate College Handbook <https://www.grad-college.iastate.edu/handbook>

Other Types of Financial Aid

The Graduate College offers more information on Financing a Graduate Degree on their website: <https://www.grad-college.iastate.edu/finance/>. Here you can find ways in which Iowa State University aids with educational expenses.

The ISU College of Agriculture and Life Sciences (CALs) also extends support as well: <https://collab.cals.iastate.edu/>

If you feel that you may qualify for any of these awards, please contact Rose Mary Ross rmross@iastate.edu.

The ISU Office of Student Financial Aid is a central resource for information about grants, loans, fellowships, and other instruments of financial aid. Please see following website: www.financialaid.iastate.edu/.

Enrolled students are eligible to apply for College of Agriculture and Life Sciences scholarships (typically due January 31) and Animal Science departmental scholarships (typically due February 15) - watch for departmental announcements.

Working Hours and Time Off (per ISU Graduate College Handbook 3.1.4)

Arrangement for a leave of absence is made between the graduate assistant and that assistant's supervisor adhering to all grant and other funding source restrictions. When a graduate assistant needs to be absent for personal reasons or illness, the supervisor should understand and accommodate that need. At the same time, the graduate assistant should attempt to plan personal leave so that it does not interfere with, or cause neglect of, the duties associated with their appointment. Supervisors of graduate assistants are responsible for ensuring that their assistants do not exceed reasonable limits for leave.

It is recommended for the assistant and supervisor discuss leave expectations within their first meeting. When a conflict arises between the graduate assistant and that assistant's supervisor regarding leave of absence use, refer to Chapter 8 to review conflict resolution process.

Teaching Opportunities and Expectations

The department considers teaching experience to be an important part of all graduate students' professional development. Therefore, teaching experience is required of all graduate students. Teaching provides valuable experience in planning, preparing, and delivering material related to your study and promotes the development of important communication skills that will be assets in your career. Thus, the department structures its graduate program to incorporate teaching opportunities for all students.

To meet this requirement, all graduate students are required to register for Animal Science 5900L Special Topics-Teaching. ANS 5900L is a variable credit course that may be taken for 1-3 credits. M.S. degree candidates are required to complete at least one semester of 5900L, registering for a minimum of 2 credits. For students in a Ph.D. program, at least two semesters of 5900L are required with registration for at least 2 credits each time (4 credits in total). In the occasion that a PhD student has already completed a M.S. AND had served as a teaching assistant, two credits can be attributed to that effort (regardless if they earned a M.S. at Iowa State or not). Coaching of judging teams by graduate students may be used once as a means of meeting the teaching requirement if the student is registered for 2 credits of ANS 5900L while doing so.

International students must pass the Oral English Certification Test (OECT) (<https://cce.grad-college.iastate.edu/speaking/oect-for-itas>) prior to registering for ANS 5900L and assisting with the teaching program.

Students may be involved in teaching at several different levels, depending upon needs, previous experience, the course material being taught, faculty needs, and the number of students enrolled in a given course. The most common teaching experience entails responsibility for one or more laboratory sections of a specific course. Normally, teaching assignments will take in to account the student's area of interest within animal science. Teaching assignments for graduate students are normally arranged by July 1 for the coming academic year. Graduate students will be contacted during spring semester to determine if they wish to be involved with teaching in the coming year and to determine teaching preferences. Faculty are also contacted to determine the teaching needs. Teaching assignments are then made with the best matches possible. Students who wish to become involved with teaching of a specific course should contact the DOGE for Animal Science departmental majors.

If you are given responsibility for a laboratory section, the usual duties include:

- Planning and conducting laboratory classes with guidance from the faculty member(s) in charge of the course
- Organizing, presenting, and explaining subject matter to students
- Assigning, grading, and returning in a timely fashion student work
- Assisting students in solving problems related to the class
- Arranging for your major professor to attend one of your classes to evaluate your teaching
- Submitting potential exam questions to the faculty in charge of the course
- Developing and grading exam or quiz questions contributing your ideas for course improvements during planning/discussion sessions with faculty;
- Providing scores, grades, or performance evaluations, as appropriate, for each of your students at the end of the semester
- Requesting student evaluations of your teaching at the end of the semester and summarizing the results for the faculty member in charge of the course and for your major professor.

The Center for Excellence in Learning and Teaching (CELT) provides excellence resources and help for students to prepare for and evaluate teaching. See www.celt.iastate.edu.

Student Grievance Procedures (per ISU Graduate College Handbook 8.5)

Several formal avenues of appeal are available to graduate students depending on the nature of the grievance. Outlined in this section are procedures designed to handle grievances concerning grades and instruction and for grievances related to scholarly and professional competence. Other appeal routes are available within the student disciplinary process and for inappropriate termination of assistantship appointments. All procedures start at the department or program level and lead through a series of steps to higher appeal channels. If a student's complaint relates to a general policy, they may also bring the matter to the attention of the GPSS either by contacting a senator or the GPSS president. Students also have the right to contact the Dean of the Graduate College about the grievance.

***Before initiating a grievance procedure**, the graduate student should check the Graduate College Handbook for any updates in the procedures, because the Graduate College policies supersede departmental policies with regard to grievance procedures.

Grievances about Grades and Instruction (per ISU Graduate College Handbook 8.5.1)

If a graduate student contends that a faculty member, in their academic capacity as a course instructor, has behaved unfairly or unprofessionally, a grievance may be reviewed through the procedure described below. This procedure may not be invoked more than one year following completion of the course. An appeal of a course grade must be initiated by midterm of the semester following the student's completion of the course.

If the dispute or perceived violation does not directly involve the graduate student's major professor, the graduate student is encouraged to contact their major professor.

The graduate student may contact the Graduate and Professional Student Senate (GPSS) by contacting the senator representing the student's academic unit or the GPSS president. The GPSS will represent the best interests of the student and may serve as a liaison between the student and the appropriate University administration and offices.

The graduate student may contact Student Assistance staff within the Dean of Student's Office. Students may contact the Dean of the Graduate College to pursue informal dispute resolution. Graduate students are encouraged to contact the Ombuds Office for unbiased and neutral assessment for informal resolution of a dispute. Concerns of discrimination, harassment, and/or sexual misconduct do not fall within these procedures, and instead should be reported to the Office of Equal Opportunity as soon as possible.

Before initiating a formal appeal, the student may wish to discuss the situation informally with a staff member of the Dean of Students Office for advice on how to deal most effectively with the problem.

Academic grievances should be resolved, if at all possible, with the individual instructor involved. If a resolution cannot be reached, the student should discuss the grievance with the instructor's department chair and submit it in writing to them. The department chair will discuss the grievance with the instructor involved and/or refer it to a department grievance committee. The department chair should respond in writing to the student within five class days.

If a resolution of the grievance cannot be made with the department chair, the student may appeal in writing to the dean of the instructor's college. In cases involving Graduate College policy or procedure, the appeal should be made to the Dean of the Graduate College. The dean will hear the explanations of the department chair and instructor and should respond in writing within ten class days of receipt of the written notice of appeal.

If the grievance cannot be resolved with the dean, the student may forward a written appeal to the Provost, who will convene a quorum of the Committee to Review Student Grievances to hear the appeal within ten class days. Within five class days following the hearing, the Provost will make a decision regarding the grievance and transmit this decision to the student, dean, department chair, and instructor involved. An appeal of the decision of the Provost may be made to the President of the University.

The time limit specified at each level may be extended by mutual agreement of all parties concerned.

Grievances Related to Scholarly and Professional Competence (per ISU Graduate College Handbook 8.5.2)

Judgment of professional competence as demonstrated in qualifying, preliminary and final oral examinations, and other clearly stated program requirements concerning competence in the field of study is the responsibility of the academic program and POS committee.

If a student contends that their scholarly or professional competence has not been evaluated fairly, they should first discuss the complaint with the person or persons most directly involved in the matter: a faculty member, major professor, POS committee, DOGE, or department chair. If these discussions are unsuccessful and further adjudication is desired, the student may submit the grievance, which must be in writing, to the appropriate program grievance committee. If no such committee exists, the DOGE (or department chair when appropriate) will appoint one. The committee should respond in writing within fifteen (15) class days. If the grievance occurs within the last 15 class days of the term, the committee should respond expeditiously, within 15 class days or no later than the beginning of the next term.

The following procedures apply:

- Each program offering graduate study must form a grievance committee (of at least four members) composed of equal numbers of representatives from the program graduate faculty and graduate students. The grievance committee may be a standing committee or may be an ad hoc committee, depending upon the program.
- The DOGE (or department chair) may serve as a nonvoting chairperson of the grievance committee.
- Written records of the committee shall include the complaint itself, the disposition of the complaint, and any other information the committee deems pertinent.
- Written records of the program grievance committee are available for study by the student filing the complaint and those making decisions at higher levels in the event of further appeal.
- The program grievance committee deliberates in private except in instances where parties contend the issue under consideration is of general interest and importance. In those cases, the committee may hold public meetings with the consent of both parties involved in the complaint.
- The graduate student (or chosen representative or advisor) and the other party (or chosen representative or advisor) have the right to present their cases orally to the grievance committee.
- The committee shall provide a written recommendation regarding the grievance to the DOGE (or department chair) of the student's major and to the student.
- The DOGE (or department chair) will then provide a written response from the graduate program to the student.

A graduate student unsatisfied with program action may appeal in writing to the Dean of the Graduate College within 15 calendar days. Upon receipt of the written appeal, the Dean forms a grievance appeal committee to review both substantive and procedural issues of the matter. The committee is constituted as follows:

- One voting member selected by the Dean of the Graduate College from among the faculty membership of the Graduate Council.
- One voting member selected by the relevant college dean.
- One voting member selected by the Executive Committee of the Graduate and Professional Student Senate.

The committee may, in addition, request the participation of one nonvoting member selected by the relevant graduate program from among those faculty members who had not participated in the original program grievance procedures. The role of this nonvoting member is to provide consultation to the committee or student on matters of professional competence.

The Dean of the Graduate College will respond to the student within 10 calendar days, and the committee will attempt to reach a final determination within 30 calendar days. It is understood, however, that this deadline is sometimes impossible to meet because of a need to interview key persons who are not available within the 30-day time frame. In such cases, every reasonable effort will be made to expedite the review, and the plaintiff shall be informed of the delay in writing.

Provisions of program grievance committees regarding the keeping of written records, opening of proceedings, and oral presentations also apply to the grievance appeal committee. Each student presenting an appeal is expected to participate actively and responsively in the grievance process at this and each level of the procedure. The grievance appeal committee submits its recommendation regarding the appeal to the Dean of the Graduate College for action. Graduate student(s) still unsatisfied with the disposition of the grievance— on matters of procedure only—may appeal in writing to the Provost and, if necessary, to the President of the University.

Termination of Assistantship Appointments (per ISU Graduate College Handbook 8.9)

A graduate assistantship appointment may be terminated for either of two reasons: 1) for cause, or 2) loss of funding. The guidelines and process addressing termination given here apply only to graduate assistantship appointments that have been formalized and do not apply to statements of intent for longer-term commitments.

Grounds for Early Termination for Cause Include:

- Failure to maintain minimum registration as a student,
- Neglect of duty or incompetence,
- Persistent refusal to follow reasonable advice and counsel of the faculty supervisor in carrying out assistantship obligations,
- Failure to maintain academic standing,
- Failure to comply with assistantship responsibilities as set forth in this handbook, departmental/program rules and regulations governing assistantships, or the terms of sponsored research agreements that fund the assistantship,
- A finding by a Research Misconduct Investigatory Committee constituted under the [University's Research Misconduct Policy](#),
- Personal conduct seriously prejudicial to the University, including violation of the Regents' Uniform Rules of Personal Conduct, state or federal law, [Student Code of Conduct](#), and General University Regulations discussed in the "Student Life" section of the [Policy Library](#)

For more information on termination proceedings, see the Graduate College Handbook. The Handbook also serves as the guide for procedures to be followed for any appeals relating to changes in terms of assistantship or disciplinary actions concerning graduate students.

Termination due to loss of funding may also be appealed to the Dean of the Graduate College but only on the basis that there was not a genuine loss of funding or that loss of funding was a pretext for improper termination. See the Graduate College Handbook (Chapter 9) for details.

**Funding for Graduate Assistants, Predoctoral Scholars
and Postdoctoral Scholars
in Connection with the Arrival of New Children
(Revision Approved February 18, 2020)**

Background

An increasing number of graduate assistants, predoctoral, and postdoctoral appointees are beginning families during their appointment periods. Faculty mentors as well as departmental and college administrators have voiced a strong need to provide short-term funding for a reasonable period around the time of the arrival of children to provide an environment that is supportive of all stakeholders. Short-term funding is particularly important in the case of graduate assistants, predoctoral scholars, and postdoctoral scholars because of their typically short appointment periods, as well as the short-term, goal-oriented nature of the projects that typically fund their appointments. It should be noted that enrollment in this program does not automatically extend the appointment period specified in the individual's Letter of Intent. If the period of leave extends beyond the end date of the appointment, a new appointment should be in place before the leave is taken. Otherwise, the funding from the Graduate College ends when the appointment ends.

Program Description

1. The purpose of this program is to provide short-term funding for up to 12 continuous weeks of paid leave for all graduate assistants, predoctoral scholars, and postdoctoral scholars who will be adding a new child to their family through birth or adoption. The Graduate College will provide a portion of the individual's stipend/salary to allow the department to replace them during their leave. All graduate assistants, predoctoral scholars, and postdoctoral scholars who attest to their status as a new parent will be eligible for short-term funding, regardless of their stipend funding source.
2. Leaves may begin during pregnancy, in the time prior to adoption, or after the arrival of the child, but the total period of paid leave may not exceed 12 weeks. It is expected that most leaves will begin no more than two months before the arrival of the child and no more than one month after the arrival of the child.
3. In co-parenting families, each parent is eligible and may split the leave if they each hold a current appointment as a GA, predoctoral scholar, or postdoctoral scholar. For example, each parent may take 6 continuous weeks of leave (or any other combination that totals no more than 12 weeks). Leaves by co-parents may be concurrent or sequential.
4. Funding will be limited to a total of twelve weeks per family for the addition of one or more children to the family at a given time (e.g., the birth or adoption of twins entitles the family to 12 weeks rather than 24 weeks of paid leave). Except in rare circumstances, only one application for Bridge Funding per family will be approved every two calendar years.
5. In eligible co-parenting families, if they wish to divide the twelve weeks, each must complete a separate form, with a note indicating that the leave will be split between the parents, and naming each co-parent and their department and college. Each parent will be paid at their current appointment rate during the leave.
6. Graduate assistants, predoctoral scholars, and postdoctoral scholars shall be allowed to return to their original appointment, according to the terms of their original appointment, following the bridge funding period.

Funding Source

The bridge funding during the leave will be provided by an equal match from the Graduate College and the academic college of the graduate assistant, predoctoral, or postdoctoral scholar. Tuition will continue to be paid by the academic department/college for graduate students.

Guidelines to Complete Request for Bridge Funding: Arrival of New Children

1. The graduate assistant, predoctoral scholar, or postdoctoral scholar needs to complete and obtain signatures for Section I. of the form, [Request for Bridge Funding: Arrival of New Children](#). If this request is in conjunction with another request from a co-parent who is also a graduate assistant, predoctoral, or postdoctoral scholar, please provide the name or University ID number of the co-parent. Each co-parent must complete a separate form.
 - a. Submit to the hiring unit(s) for the next step
2. The Hiring Department/Unit for each co-parent needs to complete Section II and submit to the Academic (Home) College(s).

3. The Academic (Home) College(s) need to
 - a. provide worktag and approval, and
 - b. forward to the Graduate College (ga_support@iastate.edu)
4. The Graduate College needs to
 - a. provide a worktag and approval, and
 - b. forward to Department/Unit contact(s) who will submit to their Finance ISD or finance_delivery@iastate.edu for the costing allocation.

GA/Postdocs

- If your Bridge Funding occurs during the academic year (fall and spring semesters), graduate assistants will need to stay registered for at least one credit during that semester. If you are registered for academic classes it is your responsibility to make arrangements with the professor to complete the course or to receive an incomplete. If you are a TA or an RA, it is your responsibility to keep your major professor/supervisor informed of the dates of your leave.
- 12-month assistantship appointments - You remain on assistantship and need to register for at least one credit during the summer.
- 9- or 10-month assistantship appointments - Your assistantship will follow its stated starting and ending dates.
- Maximum Bridge Funding is twelve (12) weeks or 60 working days. This can be taken by one parent or split between two parents if both are on appointment. If a postdoc has more than 12 weeks of vacation/sick time off, they may take more than 12 weeks if their supervisor approves.
- Your health insurance and any other benefits from your assistantship/pre- or postdoc appointment will remain intact during your Bridge Funding.
- Postdocs need to use your accrued vacation/sick time off concurrently with the Bridge Funding until you exhaust any accrued time.
- For questions regarding your eligibility for leave under the Family Medical Leave Act (FMLA) please consult University Human Resources at fmla@iastate.edu.

Hiring Departments/Units

- Benefit costs will transfer with the stipend/salary.
- College contacts are:
Human Sciences --- Ben Phillips;
College of Agriculture and Life Sciences --- Jordan Gillespie;
College of Design --- Pam Boehm;
College of Veterinary Medicine --- Karol Krumm;
College of Liberal Arts and Sciences --- Venita Currie;
College of Engineering --- Mike Francom;
Ivy College of Business --- Soma Mitra;
Graduate College --- ga_support@iastate.edu
- Postdocs need to use sick time off/vacation concurrently with the Bridge Funding until they exhaust any accrued time. Sick time off/vacation continues to accrue during the Bridge Funding.
- For some situations (possibly federal funding), part of the tuition scholarship may need to be covered by the college.

Frequently Asked Questions

1. Who can request Bridge Funding for the arrival of a child?
 - a. Graduate Assistants (RA, TA, AA), who have or will soon (within two months) add one or more new children to their family through birth, fostering, or adoption.
 - b. Postdoctoral and predoctoral research associates who have or will soon add one or more new children to their family through birth or adoption.
 - c. Co-parents may both request Bridge Funding, if both are Graduate Assistants, Postdoctoral Scholars or Predoctoral Scholars, but the total time of Bridge Funding will not exceed 12 weeks per family per addition of a child (or in rare cases, multiple children).
2. How do I request Bridge Funding for the arrival of a child?
 - a. Complete the form, [Request for Bridge Funding: Arrival of New Children](#) on the Graduate College website under: Faculty and Staff→Academic Information→Online & Paper Forms. There is a separate section for each co-parent that must be completed.
3. How long does the Bridge Funding last for the arrival of a child?
 - a. Up to 12 weeks will be granted. If co-parents both qualify and wish to apply for funding, they must split the 12 weeks of funding between them.
4. Will anyone be denied Request for Bridge Funding?
 - a. Graduate students not on assistantship will not be granted Bridge Funding.
5. I have a co-parent who is also a GA or postdoc. Can they apply for Bridge Funding, too?
 - a. Funding will be limited to a total of twelve weeks but may be shared by two parents if both are graduate assistants, predocs, or postdocs (for example, six weeks each).
6. As a postdoc, will I need to use my vacation/sick time off during the Bridge Funding?
 - a. Yes, you will need to use your accrued vacation/sick time off concurrently with the Bridge Funding.
7. As a postdoc, what if I don't have enough vacation/sick time off for the whole 12 weeks of Bridge Funding?
 - a. You will be covered up to 12 weeks during Bridge Funding regardless of how much vacation/sick time off you have accrued. If you are splitting Bridge Funding with a co-parent, the total number of weeks of Bridge Funding may not exceed 12 weeks.
8. If I am on a 9-month GA appointment during the academic year, and the child arrives during the summer, can I apply for Bridge Funding starting in the Fall?
 - a. The goal of Bridge Funding is to replace funding that you would have received, not to provide additional funding.
 - b. If you choose to begin Bridge Funding (e.g., during pregnancy or preparation for adoption or following the birth of the child) less than 12 weeks before the start of your appointment, you can request Bridge Funding for the difference between the start date and 12 weeks. Example: If your child arrives on August 1, and your graduate assistantship begins on August 15, you could request 10 weeks of Bridge Funding.
9. Do I have to take the Bridge Funding all at one time?
 - a. Yes. It is expected that the Bridge Funding would begin in late pregnancy (or in the final weeks before an adoption that requires travel or preparation) or immediately following the arrival of a child. Leaves must be continuous. If leaves are shared between co-parents, they may take their leaves simultaneously or sequentially, but each person's leave must be continuous.
10. Do I have to take the full twelve weeks?
 - a. No. Twelve weeks is the maximum amount that will be covered per family per addition of a child/children to the family.

For university leave policies, see <http://policy.iastate.edu/policy/personnel-human-relations>

The University also has procedures in place for requesting workplace accommodations for disability or religion: <https://www.hr.iastate.edu/tools-for-employees/workplace-accommodations>

Making Progress Toward a Degree

Academic Plan and Committee

The Academic Plan (AP) at Iowa State is a formal record of all courses that are required for your degree and constitutes an agreement between you and the Graduate College upon the conditions for awarding your degree. The AP is determined collaboratively by you, your major professor, and your Academic Plan Committee (APC) in accordance with the rules established by the Graduate College for granting MS and PhD degrees. The first step in preparing your AP is assembling an approved committee.

During your second semester, you should select the members of your committee and secure their approval through the Graduate College. MS degree candidates must select at least three committee members, including the candidate's major professor, who serves as the committee chair. All committee members must be approved members of the graduate faculty at least two (including the major professor) must be from within the student's major and one member must be drawn from a field outside of your major program.

Candidates for the PhD degree must assemble a committee of at least five approved graduate faculty. At least three members (including the major professor) must be from the student's major. At least one member of the committee must be from outside the major, and it is strongly recommended that two graduate faculty outside the major be included on the committee. For graduate students in the Department of Animal Science, graduate faculty outside of your major program (but still within the department) are acceptable as "outside" members of the committee.

You should consult with your major professor to select graduate faculty for your committee who can provide significant help with your degree program. After you identify prospective committee members, please be sure to confer with them prior to submitting your APC in Workday.

You should work closely with your major professor to determine the required courses for your major and to identify any additional courses that are important to your program. Your AP, when approved, becomes a binding contract that must be completed to earn your graduate degree. **A MS degree requires at least 30 credits; a PhD requires at least 72 credits.** These totals include both coursework and research credits. The required courses for each major in Animal Science are listed below. Elective courses will depend upon your research and your career objectives.

After developing a proposed AP with your major professor, you are ready to share that AP with your committee. It is **your responsibility** to prepare the proposed AP and to schedule a meeting with your committee to discuss and finalize it.

Many major professors also utilize this committee meeting to present and discuss the research that will provide the materials for your thesis or creative component. This meeting thus provides an opportunity for input and suggestions from all members of the committee. It is important to check with your major professor prior to your committee meeting to see if you are expected to present and discuss a research proposal as well as your proposed course list.

You will complete, submit, and revise your Committee and your Academic Plan in Workday:

[Workday Student: Submit Your Graduate Committee Membership](#)

[Workday Student: Complete your Academic Plan as a Graduate Student](#)

Policy on inclusion of graduate courses taken as an ISU undergraduate student (per ISU Graduate College Handbook 6.3.2).

Courses at the 4000 and 5000 levels listed in the ISU Catalog may be used in the Academic Plan (AP) even though they were taken by the student as an undergraduate at ISU.

- Up to 9 credits earned as an ISU undergraduate may be used to meet the requirements of the graduate degree. These credits must be approved by the student's APC and DOGE. Up to 6 of these credits may be at the 4000 level.
- Up to 6 of these credits could have been used to meet the undergraduate degree requirements.
- Grades of B or better are required in the courses that led to these credits.
- These credits must have been earned when the student was classified as an undergraduate, not as a nondegree undergraduate (special) student.
- Graduate programs may accept 3000-level courses taken by the student as an undergraduate at ISU to meet background deficiencies or to demonstrate proficiencies in subject matter necessary for the degree. These courses are not eligible for inclusion on the AP but may be articulated for transfer internally in the program. The student would be required to meet the minimum number of credits required for the degree without the inclusion of these undergraduate-level courses.

Transfer Credits (per ISU Graduate College Handbook 6.3.8)

At the discretion of the APC, and with the approval of the program and the Graduate College, graduate credits earned as a graduate student at another institution or through a distance education program offered by another institution may be transferred if the grade was B or better.

Such courses must have been acceptable toward an advanced degree at that institution and must have been taught by individuals having graduate faculty status at that institution. If a student wishes to transfer credits from graduate courses taken at or through another university as an undergraduate student, it is that student's responsibility to provide verification by letter from that institution that those graduate courses were not used to satisfy undergraduate requirements for a degree. (Grades from courses taken at another institution will not be included in ISU grade calculations, nor will the grades display on an ISU transcript.)

A copy of an official transcript must accompany the AP to transfer credits. The transcript should show that the courses were taken as a graduate student. There should be a clear indication that the courses taken were graduate level courses. The APC may ask for other materials, such as a course outline or accreditation of the institution, to evaluate the course. Transfer courses not completed when the AP is submitted must be completed before the term in which the student graduates. A transcript must then be submitted through the AP approval process for review.

Research credits earned at another institution are generally not transferred. In rare circumstances, the transfer of S or P marks may be accepted for research credits only. It is the responsibility of the APC to obtain a letter from the responsible faculty member at the other institution stating that research credits recommended for transfer with S or P marks are considered to be worthy of a B grade or better.

Undergraduate Courses to Make Up Academic Deficiencies (per ISU Graduate College Handbook 6.3.9)

Undergraduate-level courses are sometimes required of graduate students to make up deficiencies in undergraduate background. They do not appear on the AP. Such courses appear on transcripts and are included in the determination of the grade point average. These courses may not be taken on a P/NP basis.

Undergraduate-Level Courses Taken as a Graduate Student on the Academic Plan (per ISU Graduate College Handbook 5.1.2)

With Academic Plan Committee (APC) approval, graduate students will be permitted to use undergraduate classes from Iowa State both within and outside of their majors on their Academic Plan (AP). Undergraduate classes from other institutions are not eligible for academic plan inclusion. Other caveats include:

- No 1000- or 2000-level classes may be used, but up to nine credits of 3000- and 4000-level classes at Iowa State may be eligible
- Students are limited to 9 credits at the undergraduate level, with a limit of 3 credits at the 3000 level.
- If a 3000-level class is used, it must be a course outside of the student's undergraduate major
- Credits did not count towards their undergraduate degree.

Please note:

Graduate students who take undergraduate classes are not required to do extra work or to be exposed to material more advanced than what is taught to undergraduates.

In contrast, dual-listed courses (offered at both the undergraduate and graduate level) are required to expect more of graduate students who enroll at the 5000 level.

Individual graduate programs have the right to prohibit the use of undergraduate classes or may make the use of undergraduate classes more restrictive than the University-wide policy.

Changes in Degree Programs

In the Animal Science departmental majors, a student who desires to change from a Master of Science program to a Ph.D. program **without** completing the requirements for the M.S. degree may reapply to that program of study after completing at least 1 year (12 months) of graduate study following admission to the M.S. program. This request **must be approved** by the Committee, the DOGE, and the Dept. Chair. For further details see below.

Changes in Graduate Program or Status (per ISU Graduate College Handbook 4.2)

Most program of study changes will be completed through a new application for admission submitted by the applicant or previously-admitted student. The standard application fees and fee-payment options will apply. A new application is required because the new department or interdepartmental program needs the opportunity to review the student's information before deciding whether to accept the student in their desired program of study.

The Office of Admissions will include previously submitted transcripts, exam scores, and other materials from the prior application in the new application, completing any action items the student has already provided at the request of the program. The student will only need to provide additional information the new program requires, such as a new statement of purpose, a writing sample, portfolio, etc. In rare cases, a student can change the program of study after matriculation by contacting their graduate program for permission to make this change. For instructions on reapplying to the university or requesting a program change through your program, refer to the [Graduate Program of Study Changes](#) how-to article.

Required Course Work

Required courses for advanced degrees offered by the Department of Animal Science are listed on the following pages. For interdepartmental majors, see the DOGE of the major to determine the courses required. The total number of credits required for a M.S. degree is 30. For a Ph.D., the number of credits required is 72. In each case, however, the specific courses required will be different for the different majors. Consult the Schedule of Classes: <https://classes.iastate.edu/>

Credit Load Limitations

Maximum permitted credit loads per term are as follows:

<u>Appointment Base</u>	<u>Spring or Fall Semester</u>	<u>Summer Session</u>
no appointment	15 credits	10 credits
1/4-time or less	15 credits	10 credits
over 1/4 to 1/2-time	12 credits	6 credits
over 1/2 to 3/4-time	9 credits	5 credits

Minimum Credit Loads

During the academic year, graduate students **not on assistantships** must be registered for a minimum of nine credits to be considered full-time students and five credits for half-time status.

Graduate students **holding assistantship appointments** are considered full-time students and must be registered for at least one credit each term for which they hold appointments. **Assistants must also register through the summer to keep their appointments active.**

Animal Science Graduate Program Learning Goals

Thesis and Dissertation Programs

1. Demonstrate comprehensive understanding of scholarly literature in Animal Sciences and related disciplines.
2. Form testable hypotheses and articulate research objectives that, when met, will lead to significant contributions to Animal Sciences and related disciplines.
3. Conduct qualitative and/or quantitative research via appropriate acquisition, analysis, and reporting of data and information.
4. Interpret research results appropriately, integrating them into the existing knowledge in the discipline.
5. Clearly and accurately communicate research findings using written, oral, visual, and electronic means of communication.
6. Conduct scholarship, in teams or with independence, in ways that consistently demonstrate ethical practice and professionalism.

Non-Thesis, Coursework only, and Certificate Programs

1. Demonstrate mastery of subject matter in animal science and related disciplines.
2. Demonstrate expertise in evaluation and assessment of new developments and new technologies in animal science and related disciplines.
3. Clearly and accurately communicate technical information using written, oral, verbal and electronic means of communication.

Thesis / Creative Component / Dissertation

The thesis is considered the capstone project of MS study and should demonstrate the ability of the author to perform independent and creative work. All master's programs require a thesis, except in cases where provision is made for a non-thesis degree program. In most animal science programs, students may select the non-thesis option and, in this case, the capstone project of the program of study is a "creative component."

The exact nature of the creative component, whether a special report, annotated bibliography, research project, or some other kind of work, must be defined by you in consultation with your committee. The type of project agreed upon for your creative component must be stated in your formal Academic Plan (AP). Please consult with your major professor regarding the selection of a thesis or non-thesis option for MS study to ensure that your choice is compatible with your program and career goals.

The dissertation is the capstone project of PhD study and must conclusively demonstrate the ability of the author to conceive, design, conduct, and interpret independent, original, and creative research. Successful completion of the doctoral degree requires the successful composition and defense of a dissertation.

The following Web site provides guidance on formatting and submitting theses and dissertations. You may also view and download the ISU Thesis Manual here: <http://www.grad-college.iastate.edu/current/thesis/>

Combined BS-MS Degree Program

The Department of Animal Science offers a combined BS-MS degree program that allows selected students to complete both degrees in five years. Students normally apply for and enter the program during the third year of their BS degree program. Students must first be reviewed and approved by the department and then submit a formal application for the graduate program through the Office of Admissions. After the program has made an admissions decision, the Graduate College will make the final decision if the student is admissible. If accepted, students are expected to begin a MS thesis research project during the summer following their junior year.

For details on this program, contact Dr. Jodi Sterle (jsterle@iastate.edu), head of undergraduate teaching, or Dr. Nicholas Gabler (ngabler@iastate.edu), DOGE for Animal Science.

Expectations for Progress

Time-to-Degree Limit (per ISU Graduate College Handbook 4.4.4)

The Graduate College's time-to-degree limit for all graduate students, both master's and doctoral, is seven years. Graduate programs may establish more restrictive time-to-degree limits. For example, at the program's discretion, a student beginning a doctoral degree program at ISU with a master's degree could be expected to complete the program within three or four or five years, while a student beginning a doctoral degree program without the master's degree could be expected to complete the program within five or six or seven years. This is an option that would be enforced at the department level. Requests to extend the seven-year time limit will be considered in situations involving medical or other extenuating circumstances. Cases in which the student leaves ISU during their graduate career and later returns are dealt with individually by the Academic Plan Committee and the Graduate College.

The inclusion in the Academic Plan of coursework that is beyond the time limit ("expired" courses) must be justified in the Expired Course Petition as part of the Academic Plan approval process. [Printer-friendly version](#)

Grades and Academic Progress

For any courses listed on the AP, the minimum acceptable grade is a C. Some major programs in the department have higher expectations for courses in that major. Consult with your major professor concerning specific requirements for your program. A grade of C- is unacceptable in all cases and means that the course must be repeated to qualify for a degree. A grade of D is acceptable for courses not included on the POS but is included in calculation of the overall grade point average. A grade point average of 3.0 or higher (exclusive of research credits) is required to avoid academic probation.

Progress with Research

The research progress of graduate students is assessed primarily by the major professor but may be reviewed by other faculty or staff that are closely involved with the research project. Students involved with research typically register for research credit in ANS 6990 and receive a grade from the major professor that reflects research performance. Students should consult with their major professor on a frequent and regular basis to discuss research progress and expectations. It is normal for graduate students to experience a variety of challenges in the progression of research, and meeting those

challenges is part of developing research skills. The major professor and the committee can provide important assistance in maintaining expected progress in research.

Annual Reports

All graduate students in Animal Science, including interdepartmental majors that have Animal Science as the home department, are required to submit a written annual report of progress toward a degree. The report is to be submitted to the major professor by March 15. After discussion with the major professor, the signed report should be submitted to the DOGE by April 1.

Probation and Academic Standing (per ISU Graduate College Handbook 5.2.5)

If a graduate student does not maintain a cumulative 3.00 grade point average on all course work taken, exclusive of research credit, they may be placed on academic probation by the Dean of the Graduate College. Academic probation judgments are made on the basis of grades in course work only.

New, first-term, degree-seeking graduate students who fall below a 3.00 GPA at the end of their first semester at Iowa State University will be given a one term grace period to bring their grades back to a 3.00 GPA. These students will receive a probation warning.

Students on probation:

- will have a hold placed on future registrations
- will be required before registration each term to undergo a review of their record and have the program request a Graduate College Hold Removal in Workday to be eligible to register
- will not usually receive a Graduate College tuition award, if appointed to an assistantship
- will not be admitted to candidacy for a degree if they are a doctoral student
- must complete all courses listed on the program of study with a minimum grade of C and have achieved a 3.00 GPA or greater before graduation is approved

Dismissal for Failure to Maintain Academic Standing (per ISU Graduate College Handbook 8.7)

Under certain circumstances it may be necessary to dismiss a graduate student from an academic program. If a student is unable to transfer to another program, this will lead to the loss of active graduate status. One or more of the following are grounds for dismissal for failure to maintain academic standing.

- Failure to maintain a 3.00 cumulative grade point average,
- Failure to pass any required examinations (this includes qualifying, preliminary, or final oral) within the time frame designated by the relevant academic program,
- Failure to complete any required coursework, including 5990 and 6990 credits, within the time frame designated by the relevant academic program,
- Failure to demonstrate scholarly and professional competence,
- Failure to comply with the ethical standards of the profession for students engaged in programs leading to professional licensure,
- Academic probationary status for two or more years,
- Failure to identify a major professor in the time frame specified by the major program or the Graduate College,
- Failure to comply with graduate student responsibilities or requirements discussed in this handbook or in the relevant program's student handbook,
- A finding by a Research Misconduct Investigatory Committee constituted under the University's [Research Misconduct Policy](#),
- Failure to meet the specific requirements of the program of study as established and published by the academic department,
- Failure to meet behavioral expectations of the Student Conduct Code.

Procedure for Dismissal:

- Informal conference. If fitness of a graduate student to remain in the relevant academic program is questioned, an informal conference shall be held between the appropriate departmental or program officials (including the major professor or academic advisor) and the graduate student to attempt to resolve the matter.
- Informal Conference with the Dean of the Graduate College is optional. If the situation cannot be resolved at the informal conference, either party may bring the problem to the attention of the Dean of the Graduate College. In attempting to resolve the matter, the Dean of the Graduate College will review the case, meet with the parties concerned, and attempt to identify alternatives to dismissal.
- In cases where the steps outlined above do not lead to a resolution or acceptable improvement, the DOGE of the academic program shall notify the student in writing of dismissal. This notification shall include a clear statement of

the reasons for dismissal and the effective date of the dismissal.

Appeal Procedure:

- If dismissal occurs as a result of institutional action, such as dismissal by the Student Conduct Administrator, or the Dean of the Graduate College after a finding of Research Misconduct, the appeal procedures of the specific policy shall apply and the graduate student shall not be able to invoke the appeal procedures below.
- If dismissal is based on failure to demonstrate scholarly or professional competence, the graduate student may appeal to their program grievance committee. The procedure is described in the section of this handbook entitled "[Grievances Related to Scholarly and Professional Competence](#)."
- If the dismissal is for reasons other than scholarly or professional competence, the student may appeal in writing directly to the Dean of the Graduate College. Depending on the circumstances, the dean may rule directly or may establish an ad hoc Graduate College appeals committee, composed of equal numbers of students and faculty members serving on the Graduate Council (see [Appendix A](#)). The ad hoc appeals committee submits its recommendation to the Dean of the Graduate College for action.

Preliminary Examination – PhD Students Only

PhD students are required to take a written and oral preliminary examination for admission to PhD candidacy in animal science programs (including animal breeding and genetics, animal physiology, animal science, and meat science). Both examinations are prepared and administered by the Academic Plan Committee (APC). The preliminary exam is intended to rigorously test for knowledge in the major field and in supporting subject areas, including all course work taken for the Academic Plan. **The written preliminary exam should be completed at least two weeks prior to the oral exam date to allow the APC sufficient time to evaluate the written exam.**

Students must meet all Graduate College requirements before submitting a request for the preliminary exam. Refer to the Graduate College Handbook (Ch 4.4.2) for exact details.

The entire Academic Plan Committee must be convened for the preliminary oral examination. The student, in consultation with their major professor(s), may decide on the examination modality (in person, remote, or hybrid). The student and major professor(s) should discuss the choice of modality with the committee, and for remote or hybrid meetings, arrange for facilities and equipment to ensure full video and clear communication. Determination of meeting modality must be determined when the student submits the [Preliminary Oral Examination Request](#) in Workday. If the chosen modality is not in person, the student must inform the Graduate College of the modality at the time the request form is submitted. Best practices for remote meetings may be on the Graduate College website.

When one committee member cannot participate at a time that suits other participants, two options are available:

- Complete a request for [Committee Substitution](#) before the examination to arrange for a temporary, substitute committee member who will serve with voting rights only for the examination that the permanent member cannot participate. This option can be used in cases in which the member's absence is planned, or in cases of emergency/unplanned absences. The substitute must fill the same role (be an inside vs. outside member) as the absent member.
- The committee member may be replaced permanently on the committee by another member of the graduate faculty who can participate in the examination and commits to fulfilling all other remaining responsibilities of Academic Plan Committee service. The new member must fill the same role (be an inside vs. outside member) as the member being replaced. To make this replacement, a new APC and AP should be routed and approved.

The Graduate College is responsible for maintaining a process for the committee members to report the outcome of the examination to the college. The reporting process must require that each committee member attest to their mode of participation, the degree to which full (audio and video) and clear communication was sustained throughout the examination, and to their participation throughout the entire examination. The Graduate College is expected to confer with committees and program DOGEs in cases where at least one committee member reports problems with communication or participation. The college may nullify examinations that do not meet expectations of the college, the DOGE, and all committee members.

The preliminary oral examination must be passed at least six months prior to the final oral examination. In rare circumstances, an exception to the rule is allowed if a written request with extenuating circumstances signed by the major professor(s) and the program's DOGE is approved by the Dean of the Graduate College.

Reporting Doctoral Preliminary Oral Examination Results

Immediately following the preliminary oral examination, it is the responsibility of the Academic Plan Committee to decide whether the student will be recommended for admission to candidacy and may continue to work toward the doctoral degree. All APC members must be present at the preliminary oral exam and [report the results](#). Four options exist:

- The student passes and the APC recommends to the Graduate College that the student be admitted to candidacy.
- The student may continue their studies, but must meet other conditions specified by the APC on the [Preliminary Oral Examination Results](#) under “Conditional Pass” before being recommended for admission to candidacy.
- The student fails but is given an opportunity to repeat the examination six months after the first attempt. An explanatory letter must accompany the results.
- The student fails and is not permitted to continue to work toward a doctoral degree at ISU. An explanatory letter must accompany the results.

In a preliminary oral examination, if one member of the committee votes not to pass the candidate, the student passes, but each member of the committee must forward to the Dean of the Graduate College in writing a justification for their votes. Upon request these letters will be made available to the committee at the time of the final oral examination. If more than one member of the committee votes not to pass the student, the candidate does not pass the examination. An explanatory letter must accompany the report form.

The preliminary oral examination must be passed at least six months prior to the final oral examination.

Completing Your Program

Be aware that several deadlines are involved with a timely completion of your degree program (<https://www.grad-college.iastate.edu/calendar/>).

Final Oral Examinations (per ISU Graduate College Handbook 7.1.2)

The student degree candidate is responsible for initiating the [Request for Final Oral Examination](#), which must be submitted to the Graduate College at least three weeks before the examination. When a final oral examination includes a defense of the dissertation or thesis, the candidate must submit copies of the manuscript to members of their APC at least two weeks before the examination. A committee member who does not receive the dissertation or thesis at least two weeks before the final oral examination may cancel the examination.

Oral examinations are the primary ways the university assesses learning by graduate students. These examinations also gauge whether students' accomplishments meet expectations associated with earning advanced degrees. Oral examinations must involve the full engagement of all participants simultaneously, and unobstructed communication among participants is essential.

Students and their committees should schedule oral examinations far in advance so that all participants are together on campus for the events whenever possible.

For the final oral examination, the student, in consultation with their major professor(s), may decide on the examination modality (in person, remote, or hybrid). Similar to the preliminary oral examination guidance, the student and major professor(s) should discuss the choice of modality with the committee, and for remote or hybrid meetings, arrange for facilities and equipment to ensure full video and clear communication. Determination of meeting modality must be determined when the student submits the [Final Oral Examination Request](#). If the chosen modality is not in person, the student must inform the Graduate College of the modality at the time the request form is submitted. Best practices for remote meetings may be found on the Graduate College website.

When one committee member cannot participate at a time that suits other participants, two options are available:

- Complete the committee member change in the Workday [Manage Committee Membership](#) process before the examination to arrange for a temporary, substitute committee member who will serve with voting rights only for the examination that the permanent member cannot participate. This option can be used in cases in which the member's absence is planned, or in cases of emergency/unplanned absences. The substitute must fill the same role (be an inside vs. outside member) as the absent member.
- The committee member may be replaced permanently on the committee by another member of the graduate faculty who can participate in the examination and commits to fulfilling all other remaining responsibilities of APC service. The new member must fill the same role (be an inside vs. outside member) as the member being replaced. To make this a permanent replacement, a new [Manage Committee Membership](#) process should be routed and approved.

The Graduate College is responsible for maintaining a process for the committee members to report the outcome of the examination to the college. The reporting process must require that each committee member attest to their mode of participation, the degree to which full (audio and video) and clear communication was sustained throughout the examination, and to their participation throughout the entire examination. The Graduate College is expected to confer with committees and program DOGEs in cases where at least one committee member reports problems with communication or participation. The college may nullify examinations that do not meet expectations of the college, the DOGE, and all committee members.

Departmental Note on Final Oral Examinations:

The final exam format must include a public sharing of the student's original work and an examination conducted by the APC. The public event is a seminar that summarizes the literature and the work conducted by the student. Alternate formats of the public event are permissible when a seminar is not possible because of disability. The public event is usually held immediately before the examination portion of final exam, but it can be scheduled at a separate time (for example as part of a departmental seminar). The examination portion is held with the APC. There is no time limit unless established by the APC. This event is generally closed to the public, but the APC can make exceptions and may invite others to attend. Visitors to this portion of the exam are not included in questioning the student or in the committee deliberations. Exceptions to the described format and procedure can be requested by the APC. Each request will be reviewed by the Animal Science Department Graduate Affairs committee. The Graduate Affairs committee will make their recommendation to the Department Chair.

Reporting Final Oral Examination Results (per ISU Graduate College Handbook 7.1.2)

The [Report of the Final Oral Examination](#) must be submitted to the Graduate College immediately after the examination.

On this form the APC indicates whether the student has:

- Passed the examination and may be granted the degree sought
- Must meet some additional conditions before the degree may be granted
 - a. These conditions are specified on the report form and will remain in effect until the major professor and/or committee, if specified, report that the condition is met to the Graduate College. This process notifies the Graduate College that conditions have been satisfied and the degree may be granted.
- Not passed, but the exam may be retaken
 - a. Two months must elapse before the exam may be retaken.
 - b. A written explanation should be provided with the report.
- Not passed and the exam may not be retaken at a future date.
 - a. The degree is denied.
 - b. A written explanation should be provided with the report.

In a final oral examination, if one member of the committee votes not to pass the candidate, each member of the committee must forward to the Dean of the Graduate College in writing a justification for their vote. If more than one member of the committee votes not to pass the student, the candidate does not pass the examination.

**ANIMAL BREEDING AND GENETICS (AB&G)
GRADUATE MAJOR DEGREE REQUIREMENTS**

Required courses for Master of Science

Topics	Courses	Credits
Quantitative and Population Genetics	APC Approved	9
Mendelian Genetics	GDCB 5100 or 5110 APC approved	3
Statistics	APC Approved	3
Survey of Animal Disciplines	ANS 5010	1
Animal Breeding and Genetics Seminar	ANS 6580	1
Special Topics – Teaching	ANS 5900L	2
Seminar in Animal Science	ANS 6950	1
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
Additional coursework and research (for a total at least 30 total credits)	APC Approved	

Required courses for PhD degree

Topics	Courses	Credits
Quantitative and Population Genetics	APC Approved	9
Mendelian Genetics	GDCB 5100 or 5110 APC approved	3
Statistics	APC Approved	3
Survey of Animal Disciplines	ANS 5010	1
Animal Breeding and Genetics Seminar	ANS 6580	2
Special Topics – Teaching	ANS 5900L (two occasions)	4
Seminar in Animal Science	ANS 6950	2
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
Additional courses by specialization	See below	20-22
Additional coursework and research (for a total of at least 72 total credits)**	APC Approved	

Additional credits by specialization:

Quantitative Genetics

Topics	Courses	Credits
Statistics	APC Approved	9
Quantitative Genetics & Animal Breeding	APC Approved	9
Molecular Genetics or Immunogenetics	APC Approved	2

Molecular Genetics

Topics	Courses	Credits
Biochemistry	APC Approved	6
Molecular Genetics	APC Approved	11
Immunogenetics	APC Approved	2
Animal Breeding	APC Approved	2

Immunogenetics

Topics	Courses	Credits
Biochemistry	APC Approved	6
Microbiology and Immunology	APC Approved	7
Immunogenetics	APC Approved	2
Molecular Genetics	APC Approved	5
Animal Breeding	APC Approved	2

* This requirement of all Animal Science Students is met by completing GR ST 5650, Responsible Conduct in Research in Science and Engineering, or by completing the online course in the CITI program. See details (<http://www.compliance.iastate.edu/rcr/training/>).** Required courses for AB&G majors are not designated by course number (with the exception of ANS 5010, 5900L, 6580, and 6900) because multiple course options are available. Specific courses will be approved by the APC including the additional courses and research credits to total the 72 credits required for a PhD degree.

**ANIMAL BREEDING AND GENETICS (AB&G)
GRADUATE MINOR DEGREE REQUIREMENTS**

At the Master of Science Level

Topics	Courses	Credit
Animal Breeding and Genetics	Graduate level, APC Approved	6
Animal Breeding and Genetics Seminar	ANS 6580	1

At the PhD degree Level

Topics	Courses	Credits
Quantitative and Population Genetics	APC Approved	9
Mendelian Genetics	GDCB 5100 or 5110 APC approved	3
Statistics	APC Approved	3
Survey of Animal Disciplines	ANS 5010	1
Animal Breeding and Genetics Seminar	ANS 6580	1
Special Topics – Teaching	ANS 5900L	2
Seminar in Animal Science	ANS 6950	1
Responsible Conduct in Research	GRST 5650 or Equivalent*	1

* This requirement of all Animal Science Students is met by completing GR ST 5650, Responsible Conduct in Research in Science and Engineering, or by completing the online course in the CITI program. See details (<http://www.compliance.iastate.edu/rcr/training/>).

A graduate faculty member from the Animal Breeding and Genetics Major must be included in the APC of a student working toward a Minor in AB&G. The student will be required to demonstrate competence in the minor subject during the preliminary (in the case of the PhD student) and final examination for the major.

**ANIMAL PHYSIOLOGY
GRADUATE MAJOR DEGREE REQUIREMENTS**

Required courses for Master of Science

Topics	Courses	Credits
Survey of Animal Science Disciplines	ANS 5010	1
Seminar in Animal Physiology	ANS 6330 OR 6850	1
Advanced Vertebrate Physiology	ANS 5490	4
Statistics	STAT 5870	4
Biochemistry	BBMB 4200 (3 cr.) OR BBMB 4040 & 4050 (6 cr.)	3-6
Special Topics – Teaching	ANS 5900L	2
Seminar in Animal Science	ANS 6950	1
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
Additional coursework and research (for a total at least 30 total credits)	APC Approved	

Required courses for PhD degree

Topics	Courses	Credits
Survey of Animal Science Disciplines	ANS 5010	1
Seminar in Animal Physiology	ANS 6330 OR 6850	1
Advanced Vertebrate Physiology	ANS 5490	4
Statistics	STAT 5870	4
Biochemistry	BBMB 4200 (3 cr.) OR BBMB 4040 & 4050	3-6
Special Topics – Teaching	ANS 5900L (two occasions)	4
Seminar in Animal Science	ANS 6950	2
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
Additional coursework and research (for a total of at least 72 total credits)	APC Approved	

* This requirement of all Animal Science Students is met by completing GR ST 5650, Responsible Conduct in Research in Science and Engineering, or by completing the online course in the CITI program. See details (<http://www.compliance.iastate.edu/rcr/training/>).

Additional course requirements for Master of Science and PhD degree specializations in the physiology major are outlined here:

Reproductive Physiology Specialization for Master of Science

Topics	Courses	Credits
Seminar in Animal Physiology	ANS 6330 OR 6850	1
Physiology & Endocrinology of Animal Reproduction	ANS 5330	2
Statistics	STAT 5710	3

Reproductive Physiology Specialization for PhD degree

Topics	Courses	Credits
Seminar in Animal Physiology	ANS 6330 OR 6850 (total of two terms)	2
Physiology & Endocrinology of Animal Reproduction	ANS 5330	2
Statistics	STAT 5710	3

Muscle Biology Specialization for Master of Science

Topics	Courses	Credits
Seminar in Animal Physiology	ANS 6330 OR 6850	1
Molecular Biology of Muscle	ANS 6700	3

Muscle Biology Specialization for PhD degree

Topics	Courses	Credits
Seminar in Muscle Biology	ANS 6330 OR 6850	1
Molecular Biology of Muscle	ANS 6700	3
600 level elective in ANS or BBMB	APC Approved	3

Ethology Specialization for Master of Science

Topics	Courses	Credits
Topics in animal behavior, welfare and contemporary issues in animal behavior and welfare	ANS 5370 (A-D)	3
Special Topics: Ethology	ANS 5900N	3

Ethology Specialization for PhD degree

Topics	Courses	Credits
Topics in animal behavior, welfare and contemporary issues in animal behavior and welfare	ANS 5370 (A-D)	3
Special Topics: Ethology	ANS 5900N	3
Principles of morphology II	BMS 5310	4
Neuroanatomy	BMS 5370	3
Immunology	MICRO 5750	3
Statistical Design and the Analysis of Experiments	STAT 5710	3

Graduate students majoring in Animal Physiology without a specialization are encouraged to enroll in additional physiology courses beyond ANS 5490 to complement their scientific and professional goals.

**ANIMAL SCIENCE
GRADUATE MAJOR DEGREE REQUIREMENTS**

Required Courses for Master of Science

Topics	Courses	Credits
Survey of Animal Disciplines	ANS 5010	1
Seminar in Animal Science Disciplines	One of ANS 6030, 6330, 6580, 6840, 6850 or an APC Approved seminar	1
Statistics	STAT 5870	4
Biochemistry	BBMB 4200 (3 credits) OR BBMB 4040 & 4050 (6 credits)	3-6
Special Topics – Teaching	ANS 5900L	2
Seminar in Animal Science	ANS 6950	1
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
At least one course from at least <u>two of the five</u> subject areas in Animal Science.	Animal Breeding and Genetics: ANS 5610 (4 cr.) Nutrition: ANS 5180 (3 cr.) Nutrition: ANS 5200 (3 cr.) Physiology: ANS 5490 (4 cr.) Reproduction ANS 5330 (2 cr.) Meat Science: ANS 5700 (3 cr.)	5-8
Additional coursework and research (for a total at least 30 total credits)	APC Approved	

Required courses for PhD degree

Topics	Courses	Credits
Survey of Animal Disciplines	ANS 5010	1
Seminar in Animal Science Disciplines	One of ANS 6030, 6330, 6580, 6840, 6850 or an APC Approved seminar	1
Statistics	STAT 5870 & 5710	7
Biochemistry	BBMB 4200 (3 cr.) OR BBMB 4040 & 4050 (6 cr.)	3-6
Special Topics – Teaching	ANS 5900L (two occasions)	4
Seminar in Animal Science	ANS 6950	2
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
At least one course from <u>three of the five</u> subject areas in Animal Science	Animal Breeding and Genetics: ANS 5610(4 cr.) Nutrition: ANS 5180 (3 cr.) Nutrition: ANS 5200 (3 cr.) Physiology: ANS 5490 (4 cr.) Reproduction: ANS 5330 (2 cr.) Meat Science: ANS 5700 (3 cr.)	8-11
Additional coursework and research (for a total of at least 72 total credits)	APC Approved	

* This requirement of all Animal Science Students is met by completing GR ST 5650, Responsible Conduct in Research in Science and Engineering, or by completing the online course in the CITI program. See details (<http://www.compliance.iastate.edu/rcr/training/>).

**MEAT SCIENCE
GRADUATE MAJOR REQUIREMENTS**

Required Courses for Master of Science

Topics	Courses	Credits
Survey of Animal Disciplines	ANS 5010	1
Advanced Meat Science and Applied Muscle Biology	ANS 5700	3
Advanced Meat Processing Principles and Technology	ANS 5710	3
Special Topics – Teaching	ANS 5900L	2
Seminar in Meat Science	ANS 6840	1
Seminar in Animal Science	ANS 6950	1
Biochemistry	BBMB 4200 (3 cr.) OR BBMB 4040 & 4050 (6 cr.)	3-6
Statistics	STAT 5870	4
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
Additional coursework and research (for a total at least 30 total credits)	APC Approved	

One course in Microbiology is highly recommended

Required Courses for PhD

Topics	Courses	Credits
Survey of Animal Disciplines	ANS 5010	1
Advanced Meat Science and Applied Muscle Biology	ANS 5700	3
Advanced Meat Processing Principles and Technology	ANS 5710	3
Special Topics – Teaching	ANS 5900L (two occasions)	4
Seminar in Meat Science	ANS 6840	1
Seminar in Animal Science	ANS 6950	1
Biochemistry	BBMB 4040 & 4050 (6 cr.)	6
Statistics	STAT 5870 & 5710	7
Responsible Conduct in Research	GRST 5650 or Equivalent*	1
Additional coursework and research (for a total of at least 72 total credits)	APC Approved	

One course in Microbiology is highly recommended

* This requirement of all Animal Science Students is met by completing GR ST 5650, Responsible Conduct in Research in Science and Engineering, or by completing the online course in the CITI program. See details (<http://www.compliance.iastate.edu/rcr/training/>).

**MEAT SCIENCE
GRADUATE MINOR DEGREE REQUIREMENTS**

At the Master of Science level

Topics	Courses	Credits
Graduate Meat Science Course	ANS 5600, 5700, 5710, 6700 (two of these)	6
Meat Science Seminar	ANS 6840	1

At the PhD level

Topics	Courses	Credits
Survey of Animal Disciplines	ANS 5010	1
Graduate Meat Science Course	ANS 5600,5700, 5710, 6700 (two of these)**	6
Special Topics – Teaching	ANS 5900L	2
Seminar in Meat Science	ANS 6840	1
Seminar in Animal Science	ANS 6950	1
Biochemistry	BBMB 4200 (3 cr.) OR BBMB 4040 & 4050 (6 cr.)	3-6
Statistics	STAT 5870	4
Responsible Conduct in Research	GRST 5650 or Equivalent*	1

* This requirement of all Animal Science Students is met by completing GR ST 5650, Responsible Conduct in Research in Science and Engineering, or by completing the online course in the CITI program. See details (<http://www.compliance.iastate.edu/rcr/training/>).

**Six credits of the Meat Science coursework (ANS 5600, 5700, 5710, 6700) used to fulfill the requirements of the minor cannot be used for the graduate major.

A graduate faculty member from the Meat Science Major must be included in the APC of a student working toward a Minor in Meat Science. The student will be required to demonstrate competence in the minor subject during the preliminary (in the case of the PhD student) and final examination for the major.

Appendix- Forms

The Graduate College maintains a "Deadlines" Web site at the following URL:
<http://www.grad-college.iastate.edu/calendar/> . This page is well maintained and is updated for each term, however, in the event that the information there is not current; please contact the Graduate College directly at the telephone number given above.

Most student forms you require are available on the Graduate College Page:

<https://www.grad-college.iastate.edu/student/forms>