

# Department of Veterinary Sciences

# **Graduate Student Handbook**

2023 version, updated 8/24/2023 Most recent changes highlighted in yellow

# **Contents**

Introduction	2
Graduate Advisory Committee	2
Program of Study	2
Program Specific Degree Requirements	3
Graduate Student Assistantships	4
Retention	4
Time Limits	4
Minimum Registration	4
Service Requirements	5
Presentation Requirements	5
Preliminary Examinations	5
Thesis/Dissertation Research Proposal	5
Thesis/Dissertation Deadlines	6
Final Oral Examination	6
Defense Seminar	7
Submission of Theses and Dissertations	7
Publication of Research	7
Other Veterinary Sciences Policies and Procedures	8
Summary of Deadlines	8
Resources available to students	10

#### **Introduction**

This brief guide is presented as a supplement to the <u>University of Wyoming Catalog</u> and other relevant University publications with which you should become thoroughly familiar, especially the <u>Graduate Student Regulations and Policies</u>. Should any reader find omission of fact, process or justice herein, please bring this to the attention of the department head or member of the Department Graduate Committee. The Department of Veterinary Sciences may have stricter standards, but in all cases will follow University minimums. It is the student's responsibility to read and to adhere to all procedures and deadlines established by the University of Wyoming and the Department of Veterinary Sciences.

## **Graduate Advisory Committee**

Departmental requirements align with UW requirement for the graduate advisory committee. The graduate committee's major role is to offer guidance regarding coursework needed for your specific degree requirements and to assist you in formulating your study design and interpretation of results. A student should select his or her graduate committee by the end of the first full semester of registration, and complete the associated paperwork. The term "full semester" means either the fall and spring semester. The committee is composed of members of the University of Wyoming Graduate Faculty. Occasionally, scientists who are not part of the UW faculty may be chosen to be part of the graduate committee. Appointment of a non-UW faculty member should be discussed with the committee chair (your advisor(s)) and the head of the Department before an offer is made to join the committee. Students who have an off-campus research faculty member as chair MUST have a Veterinary Sciences academic co-chair.

Doctoral and thesis committees must have at least 5 and 3 members, respectively, including the chair(s).
 At least one member must be a UW faculty member from a department other than Veterinary Sciences.
 The external committee member cannot hold emeritus status in the department.

The graduate committee is the authoritative entity regarding the terms of your program of study, research proposal and defense exam (i.e., no administrative structure can overrule the graduate committee regarding the content of these items). The committee is nominated jointly by the student and his/her advisor, approved by the head of the department, and then is submitted to the Registrar's Office on its committee composition form. The committee members are likely to be useful mentors throughout your career, and important sources of references for jobs. They will be helpful advisors to insure your graduate experience reaches its full potential. Therefore, it is in your best interest to choose the committee members wisely and to keep the various members of the committee informed regarding the progress of your program. It is a useful practice to ask around in the department and college to insure that potential members of your committee would be a good "fit", given your research type and personality, and other members of the committee.

A petition may be filed if it is necessary to change your committee's composition. This requires the signatures of the all current members of the committee, plus that of the Department Head.

## **Program of Study**

A Program of Study is the list of formal coursework, seminars, research and thesis hours that is required to successfully complete a degree. It should be developed with and approved by the student's graduate committee. Courses on degree plans vary between students depending upon their background and career objectives. The degree plan is a contract between the student and their graduate committee. It is in the student's best interest to have the Program of Study approved as soon as possible. This should be done BEFORE the start of the second full semester. Students are not eligible to receive funds managed through the department (e.g., assistantships or travel funds) beyond the start of the

second long semester until a degree plan is approved and on file in the department. A student's program should emphasize graduate-level work, but undergraduate coursework may be included to address academic deficiencies, particularly for research skills and techniques. The amount of undergraduate (= 4000 level) courses that will count towards the M.S. or Ph.D. degree is limited to 8 credit hours. If critical deficiencies exist, your committee may require you to take additional undergraduate courses that do not contribute to the graduate degree requirements.

#### **Program Specific Degree Requirements**

Because UW Graduate regulations and policies may change often, before making important decisions, make sure to refer to Graduate Student Regulations and Policies here <a href="http://www.uwyo.edu/uwgrad/policies/index.html">http://www.uwyo.edu/uwgrad/policies/index.html</a>.

Please note, that if grad students also belong to a graduate group such as <u>Program in Ecology</u>, <u>Neuroscience</u>, or Molecular and Cellular Life Sciences, there will likely be additional or different requirements for the student's graduate program. However, the department requirements will still apply in some areas (eg. yearly presentations).

#### Master of Science

- The department only offers the thesis option (also known as Plan A).
- A minimum of 30 credit hours including 4 thesis hours must be earned in 4000-5999 level courses.
- Two semesters of graduate seminar (PATB 5515) and STAT 5050 or their equivalent are required. If PATB 5515 is not offered then a suitable alternative seminar is acceptable.
- The program of study is arranged with the student's graduate committee.
- An M.S. thesis option student must take a minimum of 26 credit hours of course work and four hours of 5960:
   Thesis Research.

#### **Doctoral Program**

- A 72 hour program. Students must meet university minimum requirements.
- Visit the Registrar's Office for more information.

A Ph.D. program requires a minimum of 72 hours of credit from UW or another approved university. This 72-hour requirement may include graduate credits earned while working toward the M.S. degree in the same area but in that case at least 42 hours of the 72 must be earned through formal course work. Additional credits toward the 72-hour requirement may include additional formal course credits such as 5980: Dissertation Research credits. Two semesters of graduate seminar (PATB 5515) will be taken in the first two years, then a minimum of one more in years 3 or 4 is also required. If PATB 5515 is not offered then a suitable alternative seminar is acceptable. Of the course work hours mentioned above, it is desirable that a minimum of about 12 hours be selected from Veterinary and Animal Sciences course offerings associated with the degree title. In unique circumstances (e.g., exceptional disciplinary academic background before arriving at UW, or special targeted career objectives) the committee may allow that fewer disciplinary courses be taken at UW in lieu of other specialized coursework. Conversely, the committee may require

additional hours for the degree or additional hours within the discipline, depending on the scope of the research problem and previous course work.

A petition may be filed if it is necessary to change the Program of Study. This requires the signatures of your committee and the head of the department. The Registrar's Office houses relevant forms for the currently enrolled graduate students.

## **Graduate Student Assistantships**

Graduate student assistantships are distributed to students based on a peer-reviewed process that assesses the graduate project, the need for assistance, and the likelihood of future funding to support the student. Applications for this assistance are due by March 1st for the following Fall semester or September 1st for the following Spring semester. The graduate student committee reviews the applications and makes recommendations to the department head who then approves the allocation of assistance. The students major advisory is responsible for ensuring the continuity of funding.

#### **Retention**

Graduate students are required to maintain a 3.0 GPA or better. A student who falls below a 3.0 GPA has ONE semester to reestablish a satisfactory GPA or face loss of assistantship funding and dismissal from the department. Once accepted, a student is allowed ONE probationary semester.

Although a 3.0 GPA is the criterion for retention, progress toward a degree and commensurate academic accomplishments are expected. If a student earns a D, F, or U in a course on their degree plan, the class or course must be repeated and a C (or better) or S achieved. A committee may write a provision into the Program of Study that certain classes require at least a B (i.e., courses that are so important to the degree that at least a B level of mastery is required).

Satisfactory work is required throughout the entire graduate student process - in the lab and/or fieldwork, analyzing data, teaching via T.A. work, writing proposals, manuscripts, thesis or dissertation, and other graduate student functions. That means coming to work every week day per your professor's requirements and within UW policies. If a student does not fulfill all requirements and/or lapses in attendance, work, etc., they will be notified and procedures according to UW policies may be instituted to end a GA (Graduate Assistantship) and also to start graduate student dismissal proceedings. These are serious issues and can be prevented by good regular communication (verbal and in writing via emails) with your professor and committees, and through attendance and diligent work per your agreement with your professor.

#### **Time Limits**

Master's students have 6 calendar years to complete their degree from the beginning of the first course taken that is listed in the Program of Study. Doctoral candidates have 4 calendar years after successful completion of their preliminary examination to complete their degree. A student has one calendar year after the final oral exam to submit the thesis or dissertation.

#### **Minimum Registration**

All graduate students are required to maintain continuous registration (even those without assistantships) until they complete all requirements for graduation, unless a specific leave of absence is granted to a student in writing by the Department Head. The department requires graduate students to be enrolled for a minimum of 1 credit hour each fall and spring semester. Any condition that requires a higher minimum registration would supersede this minimum

registration standard. Graduate students with University of Wyoming teaching or research assistantships must be registered for 9 hours during the fall and spring semesters unless:

- They have a program of study on file AND
- 90% of their coursework is complete AND
- They are working full time on their thesis.

Additional requirements for students with loans, fellowships and visas may exist. If a graduate student holding a graduate assistantship drops some courses which result in the student being registered for less than the required minimum number of hours (i.e., 9 hours in Fall and Spring semesters), the student shall not be required to add additional hours to replace the dropped hours provided the student drops after the 12th class day. Such students could maintain their graduate assistant position with a memo supporting the drop signed by the department head. Please consider these and other possible implications (e.g., some insurance programs have special enrollment considerations) when attempting to drop below the minimum hour requirements for full-time classification.

Foreign nationals should be aware that less than full-time during the spring and fall semesters may cause problems with some types of student visa requirements. Foreign nationals should be certain to never allow the time indicated on their IAP-66 or I-20 to lapse. It is usually a fairly straightforward procedure (working with International Student Services) to get the time period indicated on the form to be extended if the paperwork is started months before the time period expires. It may be difficult to get the forms re-issued if the time period has expired.

## **Service Requirements**

All graduate students with a major professor affiliated with the department will provide a measure of service outside of their graduate project during the academic year. This service may be any significant and meaningful assignment, task, opportunity, or experience or combination of experiences that the mentor deems worthy, which serves both the student and some common good (department, program, mentor, peers/undergraduate students, college, university, state, or society). Examples that would satisfy this requirement could include but are not limited to the following: teaching, diagnostic service in the veterinary laboratory, mentoring undergraduates, contributing to other graduate student research projects, upward bound, women in science, orientations for international students etc.

#### **Other Requirements**

Departmental graduate students are expected to embody a spirit of collegiality, good communication, and to participate in and help to coordinate departmental functions, social events, and other activities.

All graduate students are required to complete all necessary trainings related to UW and departmental compliance (eg. safety training, training for work with research animals), and as necessary refresher trainings.

All work from home during office hours has to be approved by the faculty advisor.

## <u>Presentation Requirements</u>

All graduate students with a major professor affiliated with the department will make an annual presentation on their research project. The only exception are graduate students who are full time employees – these will be required to present at least every other year. Other graduate students are required to attend unless excused by their major advisor. First year presentations will be for 20-25 minutes; second year onwards presentations will be for 40-50 minutes. The presentations will be to the department and committee members will be invited also. Make sure you plan your presentation well in advance with the front office associate and your advisor.

The Department of Veterinary Sciences expects students to attend local, regional and or national professional meetings to present their research – these provide important career development opportunities. Your major advisor and or departmental head may be able to cover all or part of the meeting costs. Please communicate with your advisor about which meetings you can attend. Attendance is often dependent on progress in your research project.

#### **Preliminary Examination for PhD Candidates**

A formal preliminary examination is required for all Ph.D. students. The student is not eligible to take the exam if the current GPA is less than 3.0. The committee may administer the preliminary exam when the student is within approximately 6 credit hours of completing formal courses specified on the degree plan. The preliminary examination must be given no later than the semester following the completion of the formal course work on the degree plan and at least 15 weeks prior to the final defense of the dissertation.

Preliminary examinations will cover all areas within the scope of the student's doctoral program. They should involve a written exam from each advisory committee member followed by an oral exam administered by the committee as a whole. A majority affirmative vote by the committee is required for a student to pass the preliminary examination. Students who do not graduate within 4 years of their preliminary exam are required to retake it.

A student's committee and the Graduate School may grant permission for one re-examination to a student who failed the preliminary exam. A period of at least one semester, but no more than four semesters, must elapse before the retest may take place.

#### **Thesis/Dissertation Research Proposal**

During the second full semester, the graduate student will make a formal presentation of plan of study, along with a review of the literature, to the department. The purpose of this is to encourage the student to work on his or her research proposal (see below), and to ensure that it is sound and meets the standards of the department. The research proposal represents a contract between the student and his/her graduate committee. The student should work with his or her advisor to develop the research proposal and submit it to the graduate committee for approval before their third full semester of study. The title page must be signed by the student, all members of the committee, and the Department Head. One copy of the proposal with a signed title page must be submitted to the Department Head. Copies should also be given to members of the graduate committee. Research involving animal subjects requires additional approval forms. Students will not be eligible to receive funds managed through the department (e.g., assistantships or travel funds) beyond the start of their third long semester of study until their research proposal is approved and on file in the department.

The narrative of the research proposal should be approximately 10 double-spaced pages in length and contain:

- Justification and rationale: Summarize previous research on the subject, provide literature citations, and identify the particular problems your study will help resolve.
- Statement of hypothesis: Specify questions your research is designed to answer.
- Procedure: Describe the experimental design and identify the methods of data collection and analysis to be used to definitively answer your hypothesis statements.
- Timeline: Set targets of when different components of the data collection, analysis and presentation of findings will be completed.

The committee should approve the proposal before the student begins the research. In some cases the nature of the study may require that the research begin before the proposal is approved. In such cases it is very much in the interests of the student to understand the subtleties of the research objectives and methods so that misunderstandings between

the student and his or her advisor are unlikely. The student should report regularly (i.e., at least once or twice a year) to the advisor and the advisory committee regarding research progress in order to avoid last minute surprises or misunderstandings, and to gain approval of any redirection.

#### **Thesis and Dissertation Deadlines**

Deadline dates for filing the thesis/dissertation are announced each semester by the Registrar. The research project should be designed to produce one or more publishable papers in a refereed journal. Students are encouraged to organize the document into chapters that represent stand-alone publications.

A good quality draft of the thesis/dissertation in proper format should be delivered to the graduate committee for review only after the student and his advisor agree upon technical and editorial content. Committee members have the right to reject documents with grammatical errors or papers that fail to meet high standards of scientific style. Signatures can be obtained on the thesis/dissertation only when changes recommended by the committee have been incorporated.

#### **Final Oral Examination**

Although the final oral exam tends to focus on the thesis or dissertation, additional issues may be addressed as a follow-up to the preliminary exams (Ph.D. candidates) or as an outgrowth of the discussion of the student's research, coursework or professional activity. The final exam is to be scheduled only after the graduate committee agrees that the thesis, dissertation, or professional paper is ready for public defense. All students must schedule a final Thesis or Dissertation defense seminar in conjunction with the final oral exam (see Seminar section below).

A student must make formal degree application to the Registrar before the final oral exam can be scheduled. The degree application and fee must be submitted within the time frame indicated by the Registrar. A student must be enrolled in the University in the semester in which the final examination is taken. A student's GPA must be at least 3.00, and there must be no unabsolved grades (e.g., D, F, X or perhaps C; please see program of study section for more explanation) for any course on the program of study.

A majority affirmative vote by the graduate committee is required for a student to pass the final examination.

#### **Defense Seminar**

All students will present a Final Thesis or Dissertation Research Seminar prior to the final examination. The final defense seminar must be approved by the department head at least 2 weeks prior to the scheduled date. The student should distribute copies of seminar announcement to the College of Agriculture. Life Sciences and Natural Resources, and to all Veterinary Sciences faculty, staff, and graduate students at least one week in advance of the scheduled date. The graduate committee will administer the final oral examination after the seminar audience has been excused.

#### Submission of Thesis and Dissertation

To meet deadlines for graduation, students need to begin the final defense process months in advance. Due to other commitments, particularly teaching, faculty members are often busy at the end of semesters. The student should allow adequate time to allow the graduate committee to review the thesis and sufficient time for corrections to be made.

Students should be in close contact with advisory committee members so that travel schedules can be accommodated and planning adjusted accordingly. It is the student's responsibility to initiate and to coordinate this process. Professional courtesy dictates that ample time be allowed for each step in the process if academic standards are to be maintained. It is inappropriate for students to pressure their committee members to short-circuit this process to meet graduation deadlines.

The student should schedule time for the following sequence of steps:

- 1. Student submits draft of document to major professor. Allow at least 30 days for review.
- 2. The major professor returns draft to student for revision. Normally, several drafts will be required to produce a document acceptable to the committee.
- 3. Repeat steps 1 and 2 until major professor agrees to send document to graduate committee. Allow 2 weeks for the committee to review.
- 4. Student posts defense seminar announcement at least one week in advance of the proposed final oral exam date.
- 5. The thesis/dissertation seminar is presented, and the final defense is held.
- 6. Students passing the final oral exam may be required to make additional changes to the thesis/dissertation document before the committee gives final approval. A student who fails the final defense may request permission to retake the final exam after a 6-month waiting period.
- 7. Student submits the thesis/dissertation complete with committee and Department Head approval signatures.

#### **Publication of Research**

Peer-reviewed publication of your research is vitally important to present your work to the public and is the currency with which our science is judged. It defines whether your graduate work met the standards of the discipline. One online reference for publishing is <a href="https://www.gograd.org/resources/guide-to-academic-">https://www.gograd.org/resources/guide-to-academic-</a> <u>publishing/</u> and you can also google something like "why publication is important to grad students" – many resources are available online. Students are encouraged to submit a portion of their findings to a refereed journal prior to their final examination (your profession may have more stringent requirements) and it is highly desired that the other manuscripts resulting from your research be submitted within the 6 months following your final examination. Students should discuss order of authorship with their advisor and with their professor and relevant parties early in their program. Scientific publications greatly enhance your career opportunities. They are an important return on investments of faculty, departmental, and University resources in you and your graduate education. Ask the Veterinary Science Graduate Coordinator whether the department will require a pdf copy and/or final bound copy of the thesis/dissertation for the department library. Ask your committee members whether they would like a pdf or a bound copy of the final thesis or dissertation. In some cases, the grants and contracts which support a student's project may stipulate timely publication of research results. Faculty members responsible for acquiring these funds may have professional and/or legal obligations to publish. Data collected from research sponsored by grants, assistantships, and departmental projects are the property of the Department of Veterinary Sciences. The student's advisor may assume control of research results and make a final decision on re-directing authorship for students who do not make a reasonable attempt to publish within six months of their defense. Students may publish portions of their thesis/dissertation prior to the final oral exam.

# Other University policies that impact students

Students are responsible for familiarizing themselves with rules pertaining to use of University vehicles and equipment. Parking regulations are enforced on campus. If you receive a fine, make sure you pay it as this could block your ability to complete your degree. Please familiarize yourself with current rules and protocol.

#### **Summary of Deadlines**

- 1. Find a major professor and apply for admission.
- 2. Select graduate committee before the beginning of the second full semester.
- 3. Submit Program of Study before the beginning of the second full semester.
- 4. Present plan of study with literature review in a formal seminar to Department in second semester.
- 5. Finalize a research proposal with advisor's assistance preferably before the start of the third full semester.
- 6. Ph.D. students take preliminary examination within 6 coursework hours of completing their formal degree plan, or within one semester thereafter.
- 7. Make formal application for degree to the Registrar according to deadlines issued each semester by the Registrar's Office.
- 8. Submit draft of thesis/dissertation document to advisor for evaluation and input.
- 9. Present polished draft of thesis/dissertation to committee only after major advisor agrees the document is ready.
- 10. Develop a time-line with your major professor for submitting journal article(s) resulting from the graduate research. It is required that one chapter be submitted to a peer-reviewed journal prior to the defense. It is highly desirable that the other manuscripts resulting from your research be submitted within 6 months of final examination.
- 11. Schedule final oral examination after committee has approved document.
- 12. The Graduation/Title Form must be filed by the Thesis and Dissertation Deadlines set by the Registrar (approximately midterm-check Registrar schedule) for the semester in which graduation is planned.
- 13. Advertise defense seminar.
- 14. Pass final oral examination.
- 15. Submit thesis/dissertation to the Graduate School.
- 16. Schedule an exit meeting with the Department Head.

#### Resources available to UW graduate students

Here are some resources for graduate students outside the department. If you are seeking assistance with anything we recommend asking your major advisor first.

#### Resources for all graduate students

Legal resources free legal advice for students

Student health

Volunteer opportunities at English language center for native English speakers

Office of the student ombudsperson to express concerns outside of the department

#### Resources for international students.

International students and scholars for all VISA related issues

Global student ambassador's opportunity for involvement with international programs

International graduate teaching assistant support evaluation and teaching English for international GTA's

English language center – various events including social activities for non-native English speakers