

INTRODUCTION

Congratulations! You have been accepted to Graduate Programs in the Department of Wildland Resources. This handbook describes the basic requirements for obtaining a graduate degree in the Wildland Resources (WILD) Department. The handbook also provides some suggestions for making your graduate program less difficult and more fulfilling. Many of these points will be familiar to students with graduate school experience; however, they are intended to help those with less experience and to ensure a common, but minimal, understanding for everyone.

Introduction to Graduate Studies

Graduate studies, unlike more general undergraduate programs, focus upon a chosen area of specialization in a profession. You have expressed the desire to participate in a specialization, and you should be excited about this opportunity. Graduate school differs from undergraduate studies in many ways:

- Graduate programs provide opportunities for students to gain knowledge and skills not readily available to them from a baccalaureate-level program.
- Graduate studies are much more than striving for good grades in course work. As a beginning professional, you are expected to demonstrate initiative, ambition, excitement, and creativity.
- Course work is only a part of your studies. Reading and discussing additional ideas with your peers are critical components of graduate study. Our physical and on-line libraries should be a second home, as you independently delve into additional past and current literature. You will not fully attain expertise in the profession by course work alone – independent discovery and discussion are critical elements.
- The principal difference between a B.S. and most graduate degree programs lies in participation in research. Whereas most undergraduates do not become involved in generating new knowledge, the major task of a graduate student is learning how to design and carry out a research project.
- Professors should be viewed as mentors and advisors who expect you to perform as a fellow member of the profession. Your fellow students should be viewed as peers and colleagues who help you formulate ideas and develop your skills through constructive criticism.
- Learning to ask the “important” questions and seeking answers is an aspect of professional development. You should strive to develop the ability to ask probing questions and to seek answers. Graduate studies help you to learn how to address problems, not how to recite dogma. Hopefully, you will have the opportunity to answer some of the pressing questions in the profession.
- A chosen profession should be exciting and rewarding and if you are not enjoying your education, re-evaluate your goals. Even though you should be having fun, you should be continually evaluating your performance. Are you pleased with your progress? How does your progress compare with that of other graduate students, faculty and others in the profession? Are you progressing towards a leadership role in the profession? Are you attaining a competitive position, given the current job-market and the qualifications of others in the profession?

Departmental Philosophy and Advice on Graduate Studies

Many of these were originally made by Stearns and Huey (Stearns, S. 1987. Some modest advice for graduate students. Bulletin of the Ecological Society of America 68(2):145-150, R.B. Huey. 1987. Reply to Stearns: some cynical advice for graduate students. Bulletin of the Ecological Society of America 68(2):150-153).

Departmental views on the purpose and meaning of graduate study are as varied as the faculty. There are certain elements, however, that are generally shared both here at USU, and at other programs across the nation. Below are some observations intended to enhance your graduate education.

Know Why Your Work is Important

When you first begin your graduate program, read and think widely and exhaustively. Assume that everything you read is suspect until the author manages to convince you otherwise. If you do not understand something, reread it. This first stage is difficult because students often feel guilty about not getting started on their own research. You will continually be asking yourself, "What am I doing here?" Be patient. This stage is critical to your personal development and to maintaining the flow of new ideas into science. Here you decide what constitutes an important problem. It is best to arrive at this decision independently for two reasons. First, if someone hands you a problem, you won't feel that it is yours, you won't have the possessiveness that makes you want to work on it, defend it, fight for it, and make it come to fruition. Secondly, your graduate degree work will shape your future. It is your choice in which field you will carry out your work. It is also important to the dynamic of science that your entry be well thought out. This is one point where you can start a whole new area of research. Remember, what sense does it make to start gathering data if you don't really know what you're going to do with it.

The previous paragraph definitely applies to PhD projects, but it might be less relevant to MS projects where you are likely to have accepted a position on a project that is relatively predefined. In this case, it is really important that you figure out a way to take ownership of the project. One thing you'll still want to do is read broadly about the topic and make sure you understand all the literature and reasoning behind the proposal that your advisor likely wrote and got funded. Then, if the project has not started yet, think about ways that you might want to add or improve the project, and talk to your advisor about possibly incorporating these changes. If the work has started, there is still time to have input. If it has started, think about potential side projects or additional data you might want to collect. Either way, it's still very important to have some ownership over what you're doing and it's important for you to think about ways to do that.

Take Advantage of Informal Learning Opportunities

Alert graduate students will find that there are as many, if not more, opportunities for them to learn from fellow students as from classes or conferences with their professors. The students that gain the most from their graduate years take every opportunity to talk with students with experience from other parts of USU, the U.S., and the world. Students can learn a great deal by sharing work efforts, and traveling to different study areas with other students and/or professors. The department will try to facilitate these opportunities for interaction. Interaction will not be forced, however. Thus, a student that quietly keeps to him or herself working only on his/her research, will gain only a fraction of the experience that the sociable, widely inquiring student will be able to obtain. Lifelong professional ties can be built between fellow students to enhance the student's long-term chances for success.

The department and college will periodically schedule social gatherings for faculty and graduate students to assist in creating a sense of bonding and sharing. All graduate students are strongly encouraged to participate in those activities. Graduate students can also serve as role models and as supporters of undergraduates in these activities.

Take Every Opportunity to Present and Discuss Your Research

By enrolling in graduate school, you've committed to spending much time, energy and money over the next few years in pursuing a graduate degree. It is important that you obtain the most out of your program, and that your work be as good as it can be. To do this, take every opportunity to present and discuss your research and ideas. There are many opportunities to do so. Volunteer to give a departmental or club seminar. Offer to give a guest lecture in a faculty member's course. The offer will generally be appreciated, especially when faculty have scheduled time out of town for research or to attend professional meetings. Graduate students are strongly encouraged to join and participate in the activities of pertinent professional societies such as the Ecological Society of America (ESA), Society of Range Management (SRM), the Wildlife Society (TWS), and the Society of American Foresters (SAF). Most societies have special low student dues in recognition of student budgetary constraints. In addition to reading journals and newsletters, the student should attend professional meetings whenever possible. Students serving on professional society committees and/or delivering papers will usually be able to obtain partial travel expenses from their project, department, or the Graduate School <http://rgs.usu.edu/graduateschool/travel-award/>.

Following their first year, PhD students will be encouraged do one professional-style presentation a year. MS students will also be strongly encouraged to present at a professional meeting at least once during their program. Where and when you might want to do this is something to think about early in the process. **The department and College have some funding to support travel to conferences where graduate students are presenting.** We strongly encourage you to take advantage of this while you're here.

Plan to Publish Your Results

A report, thesis, or dissertation is not considered a publication. While theses are now published on-line and thus more widely accessible, these documents are not peer-reviewed by the scientific community at large. Anyone who accepts public monies to carry out research has an obligation to make the results available to the public that paid tax dollars or donated foundation money that enabled the research to be accomplished, but also to subject their science to standards set in the scientific community. Consequently, every student, especially those supported on research assistantships or fellowships, is expected to get at least the main elements of his or her research into widely available, publishable form. Not only is this an obligation to the funders, but it is important to your own professional development. Finally, the stature of the department and its continuing ability to attract research funds depends on this process. Maintenance of departmental stature is of overall value to all past and potential recipients of graduate degrees. Present graduates draw on the past departmental reputation as they vie for positions in the current job market.

Take Charge of Your Graduate Program

Some of the greatest catastrophes in graduate education could have been avoided by a little intelligent foresight. Although it may sound bad, assume the worst. Perhaps your proposed research does not work, funding might fall through, or one of your faculty advisors might become unsupportive—or even hostile. Plan for alternatives.

It is also important to realize that although most professors care about you and are willing to help, faculty are busy and have very limited time. As a result, decide early on that you are in charge of your program. The degree you get is in large part yours to create. Your major professor can advise you and protect you to a certain extent from bureaucratic and financial pitfalls, but he/she should not tell you or have to tell you exactly what to do. It is up to you to take charge of your degree. If you need advice, ask for it – it's the faculty member's job to provide it.

Recognize that Psychological Problems Are Often Your Biggest Barrier to Success

You must establish a firm psychological stance early in your graduate career to keep from being buffeted by the many demands that will be made on your time. If you're not careful, the pressures of course work, teaching, and who knows what else, can be overwhelming. Here are a few things to watch out for:

- The nature of completing your graduate program often leads students to believe that their value as a person is being judged. No matter how hard you try, you won't be able to avoid this. No one does. It stems from the open-ended nature of the thesis problem. You have to decide what a "good" thesis is. A thesis can always be made better, which too often leads to an endless cycle of revisions.
- Recognize that you cannot produce a "perfect" thesis. There are going to be flaws in it, as there are in everything. Settle down to make it as good as you can within the limits of time, money, energy, encouragement, and thought at your disposal.
- Get all of your course requirements and examinations out of the way as soon as possible. Not only do you thereby clear the decks for your thesis, but you also convince yourself, by successfully jumping each hurdle, that you are good enough after all.
- Make solid and reasonable timelines with your advisor, and stick to your deadlines. Procrastination because of some of the above issues can not only drag out the process, but also influence your ability to think you can do this. Keep working and you will get there.

If mental health problems do develop during your program, there are resources on campus to help you with this. Please check out this resource for more information: <https://counseling.usu.edu/>

GRADUATE PROGRAMS IN THE WILDLAND RESOURCES DEPARTMENT

Departmental Degree Programs

There are several different graduate degree programs offered through the WILD Department including MS and PhD degrees in Ecology, Forestry, Range Science, and Wildlife Biology. These degree programs are described below.

Master of Science (MS) Program

For the MS candidate, this is likely to be a first experience in actually doing as opposed to only hearing about science. Consequently, many MS candidates need considerable guidance on the part of their major professor and supervisory committee. The student may well be following up on ideas that have been initially generated by his/her major professor or committee members. If the student is financially supported on funded research, it is likely that the major professor wrote the proposal and was awarded a grant or made a successful bid on a contract well before the student arrived. The student's role may be largely that of an apprentice, serving as a data gatherer and analyst; research is learned through intimate involvement in a structured example. This may be the student's only exposure to research if the MS is the terminal degree. Regardless of career objectives, the student should be able to understand the scientific process and thus be better able to critically review and use scientific literature in the future.

Most MS research programs allow latitude for a student to suggest changes in design, data collection, and analysis. Most of the interpretations of the data should be the student's own. The major professor and committee provide editorial comment and suggestions. The degree of originality shown during the MS program is often used as an indication of probable aptitude for a PhD-level program.

There are two types of MS programs at USU. **Plan A** programs include a significant research component that leads to a thesis. The very large majority of our MS students do a Plan A. Plan A student needs to defend their theses and get approval via the graduate school, who will submit the final product to the Merrill-Cazier Library for archiving. The **Plan B** option requires the production of a paper, which is usually a review of literature. Plan B papers are defended, but are not reviewed by the School of Graduate Studies associate dean or signed by the graduate dean. Plan B papers must be submitted to the Merrill-Cazier Library for archiving after department/committee approval. This department regards an MS **Plan B** program as a terminal degree. That is, an Plan B graduate typically would not apply subsequently for a PhD program, although that option is not precluded. The rationale is that there will be little basis to judge the student's ability to plan and conduct original field or laboratory research from an MS Plan B degree program.

Doctor of Philosophy (PhD) Program

The end goal of the PhD program is that the student will become a colleague. Attainment of a PhD brings the expectation that the individual can eventually serve as a project leader. Therefore, the PhD student is usually heavily involved in the generation of original ideas, proposal writing, and funding negotiations. The student thus has to show considerable command of the literature, creativity at hypothesis formulation, and skill at research design and data analysis.

Interdepartmental Program

Interdepartmental Program in Ecology

The ecology program at USU is administered by the interdepartmental Ecology Center. Its goals are to promote research and graduate education in the science of ecology and to provide expert, professional information and advice for decision makers considering actions that affect the environment. The research carried out by the center's associates covers the full spectrum of ecology.

Students can earn an MS or PhD degree in Ecology while maintaining residence in one of the participating departments; the center itself does not grant degrees. The process is generally the same as other degree programs in our department - the candidate selects and is assigned a major professor from the department appropriate to his or her interests. However, the student in this case chooses to do an Ecology degree instead of a Forestry, Range Science, and Wildlife Biology degree. This choice is up to the student but something you should talk over with your advisor.

The Ecology degrees do have some course requirements that are not part of the other degree programs. Students who are part of this program need to attend regular almost monthly research seminars. You must register for the Ecology Seminar in the fall semester for 2 years for a MS and 3 years for a PhD, and attend the seminar in the spring semester.

In addition, the students need to take some courses from research blocks. The requirement is 3 credits from two of the blocks for MS students and 3 credits from 3 blocks for PhD students. The blocks are #1 Biophysical Ecology, #2 Organismic, Population, and Evolutionary Ecology, #3 Community, Ecosystem, and Landscape Ecology, #4 Quantitative Ecology, and #5 Human Ecology. Most students have no problem meeting these requirements without much, if any, effort as most courses you will take fall someone on this list.

Further, there are some economic benefits for being part of this program. They partially support funding to attend professional meetings, offer funding to pay for publication costs, offer graduate research awards, and sometimes there are "finishing-up" funds available for PhD students.

These requirements may change, so be sure to know what requirements are specific to the time period of your program of study. See this page for more details: https://ecology.usu.edu/for_students/index

GRADUATE STUDENT RESPONSIBILITIES

- YOU ARE RESPONSIBLE FOR KEEPING TRACK OF ALL FORMS REQUIRED BY THE GRADUATE SCHOOL AND ENSURING THEY ARE SUBMITTED ON TIME. ALL FORMS MUST BE SUBMITTED AND APPROVED BY THE GRADUATE SCHOOL AT THE APPROPRIATE TIME BEFORE A DEFENSE IS SCHEDULED OR PERMISSION TO DEFEND MAY NOT BE GRANTED.
- THE GRADUATE SCHOOL HAS A STATUTE OF LIMITATIONS FOR COMPLETING AN MS THAT IS 6 YEARS OR PHD DEGREE THAT IS 8 YEARS. IF YOUR COURSEWORK EXCEEDS THE 8 YEAR LIMIT, IT MUST BE REVALIDATED OR RETAKEN WITH WRITTEN APPROVAL OF YOUR MAJOR PROFESSOR/SUPERVISORY COMMITTEE, DEPARTMENT HEAD, AND DEAN OF GRADUATE STUDIES.
- YOU ARE RESPONSIBLE FOR MEETING ALL ADDITIONAL GRADUATE SCHOOL REQUIREMENTS AND DEADLINES, ESPECIALLY THOSE FOR PARTICULAR COMMENCEMENT DATES.
- YOU ARE RESPONSIBLE FOR ENSURING THAT YOUR THESIS/DISSERTATION REFLECTS YOUR ORIGINAL WORK.

DEFINITION OF TERMS

Major Professor

Your major professor should be your principal mentor for guiding you through graduate studies. Major professors have considerable flexibility in designing your graduate training, and differ considerably in the way in which they deal with their graduate students. An atmosphere of mutual respect should be maintained because you are working together as professionals. Remember, as you selected your major professor on the basis of his/her expertise and reputation, they also selected you based on your experience and interest. Your major professor has a stake in your progress and wants to see you succeed for several reasons including that the product of your work may be required to a funding agency as part of an agreement for taking the funding and because your future professional performance will reflect on his/her professional reputation. But, your professional development is *the principal* role of faculty in the Graduate School.

You should feel comfortable coming to your major professor with professional concerns and should seek his or her advice regarding your professional progress. You should discuss advances in your profession with your major professor, the same as any professional does with another professional in the field. Your major professor is hopefully your advocate who will do all within his or her power to help you during your graduate studies. However, your major professor also has an obligation as a faculty member in the Graduate School to evaluate your progress and enforce your timely progression through the graduate program.

Maintain open and frequent communication with your major professor. Most conflicts between graduate students and their major professor arise when lines of communication are not maintained and used on a frequent basis. Conflicts do arise. Try to resolve them through frank and open discussion, because you are professionals working together. If this is no longer possible, remember that the Department Head can aid by arbitrating differences.

Two particular points that you should resolve early with your major professor are authorship (and patent) arrangements arising from research projects that you conduct together. Faculty attitudes differ on these points, and you need to be aware of your major professor's expectations and make your expectations known to your major professor.

Supervisory Committee

The Supervisory Committee superintends the entire graduate program of the matriculated student. Members are chosen by the major professor and graduate student for their potential contribution to the student's academic and research program. Supervisory Committee membership is approved by the Wildland Resources Department Head, and the Dean of the School of Graduate Studies. All committee members must be on the graduate faculty list kept by the School of Graduate Studies.

When a student is accepted to a master's degree program, the department head appoints an advisor, who will become the student's major professor. In master's degree programs, a supervisory committee will be established for each student. During the first semester following matriculation, the student should meet with their major professor to discuss the appointment of a supervisory committee. A completed **Supervisory Committee** form should be submitted by the graduate program coordinator (GPC) to the dean of the School of Graduate Studies for final approval **by the end of the student's second semester**. A master's degree supervisory committee must include at least three faculty members who are approved by the department head and the dean of the School of Graduate Studies. At least one member must represent the student's area of specialization, and at least one must be from outside the specialization area. Upon recommendation of the department head, emeritus faculty may serve on supervisory committees, but may not chair new committees. To be clear, all committee members can be from the same department, but just need to have different specializations (for example, population ecology vs. conservation biology).

A PhD student will be appointed an advisor and should put together a supervisory committee, as described above. A completed **Supervisory Committee** form must be submitted to the School of Graduate Studies for approval **by the end of the student's third semester following matriculation**.

A doctoral supervisory committee must include at least five faculty members with doctoral degrees who are approved by the department head and college dean, not the dean of the School of Graduate Studies. Three members must be from within and at least one must be from outside the department or interdepartmental degree-granting program in which the student is matriculated. Upon recommendation of the department head, emeritus faculty may serve on supervisory committees, but may not chair new committees.

Committee changes are not to be made within the six weeks prior to the final defense. It is professional etiquette to inform committee members if they have been removed from the committee.

Some students want to have a person serve on their committee who is not currently part of USU. There is a process for doing this. Primarily, your major advisor has to present the person's resume and reason for being part of your committee to the WILD department during a department meeting. Then the department votes on whether or not that person should receive the status required through the university to be a formal part of your committee.

Further, it is possible to have a committee larger than the requirements. However, this is usually not encouraged because of the difficulties in getting large committees together for meetings, qualifying exams, and defenses.

Within School of Graduate Studies and departmental requirements, the supervisory committee determines the courses for the student's Program of Study; conducts departmental qualifying examinations (if required); supervises the student's thesis research, Plan B paper, and conducts the defense or final examination. The defense or final examination must be scheduled through the School of Graduate Studies. The major professor, who serves as the chairperson of the committee, usually directs the thesis, paper, or other degree project.

Once you have established your committee (they are requested to serve and are listed on the *Supervisory Committee Form*), meet with them frequently as a group or individually to discuss your progress and problems. They are there for you to use as a "sounding board" so that your research progresses smoothly. They will be of little use to you if you only talk to them when the necessary formal meetings take place.

Your supervisory committee must be officially designated (supervisory committee form signed by the Graduate Dean) **prior to any official activities such as the consideration and approval of the student's program of study,**

signing of your graduate project proposal, your research seminar, etc. Therefore, major professor and student should select the members carefully and promptly confirm their willingness to serve.

Graduate Orientation

Before starting graduate school, it is required that you attend a 1-2 night overnight orientation for the WILD department. Because this is only offered before the start of the fall semester, if you start in the spring semester, you need to plan to attend the orientation the following fall. This orientation is for all first-year MS and PhD students. The meeting will introduce you to the logistics of graduate school at USU, other fellow graduate students in your department, and many of the professors involved in graduate education in our department. This is important cohort building experience that will prepare you for the degree program ahead.

Committee Meetings

It is advisable that once you have established your committee that you have a committee meeting. At this meeting, paper work for your program of study (discussed below) and other plans for your degree should be discussed. It is especially important at or before this committee meeting to determine whether there are committee members who think they might have a difficult time reading your thesis in the allotted minimum of 10 working days, or reading chapters ready to be submitted for publication in the allotted 15 working days. It also might be appropriate to discuss the general planned format of your thesis (e.g., journal articles versus the more classic monograph format). There are also some faculty members who typically do not work with graduate students during the summer months, whether it be attending exams or defense, or reading theses. While it might be difficult to mention these issues at this time, it is important to identify potential conflicts in these areas early.

Program of Study

With the aid of your major professor, you should construct a tentative list of courses and a schedule of when they will be taken. These courses and their scheduling should “best” serve to meet your professional goals and prepare you for your immediate research needs. The course list should be formalized with and agreed to by your supervisory committee. The Program of Study should be entered into DegreeWorks by the student **by the end of the second semester following matriculation for an MS student and the end of the third semester for a PhD student.** The student should contact the department’s staff assistant, also known as the Graduate Program Coordinator (GPC), once the Program of Study is in DegreeWorks. The GPC will forward it to the School of Graduate Studies for processing, signatures, and approval. Amendments to the Program of Study are made by completing the Program of Study Revision form found on the School of Graduate Studies website. Submission of a new Program of Study is *not* necessary.

The only course *required* by the department is participation in and registration for **Departmental Seminar** (WILD 6800/7800, 1 credit). In the fall, the seminar is on Wednesday at 4:00 p.m. combined with the other departments of the College of Natural Resources. In the spring, the Wildland Resources Department seminar is on Wednesday at 4:00 p.m. **You must register for departmental seminar at least once** (fall or spring) during your degree program. You are required to attend at least two-thirds of these weekly seminars for a passing (*P*) grade. The seminar may afford students opportunities to present their ideas for peer and faculty review. If you choose to affiliate with other programs, such as the Ecology Center, there may be other required courses that you must complete (see literature on these programs).

A common mistake is for students to register for Continuing Graduate Advisement (WILD 6990-7990) instead of Thesis/Dissertation Research (WILD 6970/7970) or visa-versa. CGA cannot go on a program of study. To avoid costly petitions to change these credits to the correct credits, make sure you are registering for the correct course.

You should be aware that courses not on your approved Program of Study form will not be covered by a tuition award. If you have taken a course and received an award for the course, and it does not appear on your approved Program of Study, you will be required to pay back the award. It is also critical that you submit your Program of Study in a timely manner or it will delay approval of a tuition award.

The Program of Study for the graduate degree must meet certain requirements:

1) Types of courses

- a) Courses listed **2990 and below** are lower-division courses and are not acceptable for graduate degree programs of study.
- b) Courses listed as **3000-4990** are junior/senior, upper-division undergraduate courses. Up to 3 semester credits of coursework at this level **may be used**. No more than 15 semester credits of 3000-5990 level coursework may be used for a graduate degree, except for a doctorate without a master's degree, for which a total of 21 semester credits of 3000-5990 level coursework may be used. Up to 3 semester credits of coursework at the 3000-4990 level may be included within the 15 or 21 semester credit limit, upon recommendation by the student's supervisory committee and approval by the graduate dean.
- c) **5000-5990** are advanced, upper-division courses and may be used in a graduate program if approved by the supervisory committee (see above).
- d) **6000-6989** are master's-level courses. With supervisory committee approval, they may be used in a doctoral program.
- e) **6990 and 7990** (continuing graduate advisement) credits, INST 7920, and IELI 7920 cannot be used in a degree program.
- f) **7000-7989** are doctorate-level courses. With supervisory committee and instructor approval, they may be used in a master's program.

NOTE: The Program of Study for a Master's degree, or for a doctoral degree if the student has a Master's degree, must include at least 15 semester credits at the level of 6000 or above. For a doctoral degree, if the student does not have a Master's degree, the Program of Study must include at least 30 credits at the level of 6000 or above. Coursework that is below the 5000 level should typically be in areas outside the student's graduate degree field, and must be approved by the student's supervisory committee as appropriate for the student's individual degree program. Courses that students entering the graduate program are expected to have taken as undergraduates and prerequisites for graduate courses may not be included on a Program of Study.

2) Audited Courses

Audited courses may not be used for a degree program or toward status as a full-time student. Credits in the following areas are not acceptable in a degree program: foreign languages, continuing graduate advisement, individual home study, military science, and courses numbered below 3000. No more than 12 workshop credits may be applied to a master's degree.

3) Minimum Grades and Credit Acceptability

Graduate students are required to maintain at least a 3.0 GPA for degree-program courses. Grades below *C* will not be accepted for a graduate degree.

4) P-Grade Policy

P (Pass) will be accepted only for seminars, special problems, interdisciplinary workshops, thesis or dissertation research, and continuing graduate advisement.

5) Transfer Credits

A student's supervisory committee may recommend transfer of **graduate** credits earned at another accredited institution. The credits must not have been used for another degree. Only 12 semester credits earned before matriculation at USU may be transferred. Credits for a course with a *P* grade cannot be transferred from another university. Transfer credits cannot replace required residency credit. Transfer credits are subject to approval of the supervisory committee and the dean of the School of Graduate Studies. Transfer credit which is more than eight years old may not be acceptable. Transfer credits will be shown on official USU transcripts upon completion of the degree.

6) Research Approval and Permits

All University research involving human subjects, animal subjects, radiation materials, recombinant DNA, or biohazardous materials must be reviewed and approved by the appropriate University committee(s) **before the research is started**. Graduate students are, with the assistance of their advisors, responsible for obtaining the necessary approval for their research. Verification of approval must be submitted to the School of Graduate Studies before the student's master's Program of Study or doctoral Application for Candidacy can be approved. Because these are the most common USU permits required for thesis research, IACUC (Institutional Animal Care and Use Committee) and IRB (Institutional Review Board), we mention them specifically here. These permits to work with animal and human subjects, respectively, can sometimes take months to get approved. We recommend you start the process at least 6 months before the field work begins. For further information, contact the School of Graduate Studies or the Office of the Vice President for Research.

7) Continuous Graduate Registration

Graduate students using University facilities or faculty time must be registered for a minimum of 3 graduate credits every semester until completion of all degree requirements, except, in some cases, the semester of final thesis or dissertation approval. Students employed as graduate teaching or research assistants must be registered as full-time matriculated students.

A graduate student who is not using University facilities or faculty time may meet the continuous registration requirement by paying the **Continuous Registration Fee** of \$100 per semester (not necessary for summer semester). This alternative requires an application, found on the School of Graduate Studies website, and approval from the department head, including verification that the student is not using University facilities and/or faculty time. International students usually do not qualify to pay the Continuous Registration Fee because of immigration regulations.

8) Grace Semester

The semester a student defends (or redefends) a thesis, Plan B paper, or dissertation, or takes final oral examinations, the student must be registered for at least 3 credits. Doctoral and master's Plan A, Plan B, and Plan C students will be given until the last day of the next semester (spring, summer, or fall, known as a grace semester) following the defense to finish degree requirements. If a student has not completed all degree requirements by the end of the grace semester, the student must pay a \$100 Late Completion Fee for each semester following the grace semester. If working with faculty involves more than routine submission of the thesis or dissertation to the assistant dean, registration for 3 or more credits is required. After one year redefense may be required. If all degree requirements are not complete within two years of a successful defense then the major professor must submit to the graduate dean a letter, signed by all members of the supervisory committee, justifying why the student should not be required to re-define the thesis, Plan B paper, or dissertation.

9) Grace Semester for International Students

USU 7777 is a new course that will allow international students to have a semester similar to the "grace semester" available to domestic students (certain stipulations apply—see department or School of Graduate Studies for complete course details; registration is done at the School of Graduate Studies). The purpose of the course is to

maintain the "in-status" classification with ICE without paying tuition. Therefore, because the course is not associated with any credits, students who enroll are ineligible for graduate assistantships or subsidized health insurance.

If international students need to use University facilities during the "grace semester" course, they can pay the fees associated with the 5-credit tuition amount at the Registrar's Office. If more time is required after the grace semester, then the student will need to enroll for 3 credit hours and pay the full tuition amount. After one year, redefense may be required.

Because of SEVIS regulations, a student holding an F-1 or J-1 visa is not eligible to pay the \$100 fee to complete the degree, but must be registered as a full-time student through the semester of completion.

10) Leave of Absence

A leave of absence, during which neither continuous registration, nor a \$100 payment is required, may be granted under the following conditions:

1. Illness, required military service, and other extenuating circumstances acceptable to the department head and the graduate dean.
2. Lack of availability of courses in a planned Extension program.
3. Participation in a planned program based primarily on summer semester courses.

For either 2 or 3, the student must have an approved Program of Study on file in the School of Graduate Studies before a leave will be granted.

A leave of absence must be approved by the graduate dean, upon written recommendation of the department head. A leave of absence may be the basis for extending the time limit to complete a degree, but not to extend the time limit for course validity.

11) Low Scholarship Notification

Students whose GPA is below 3.0 for any semester will be notified by letter that their academic performance is unsatisfactory. Students whose cumulative GPA falls below 3.0 will be placed on probationary status. If a student remains on probationary status for two consecutive semesters, the School of Graduate Studies will ask the student's department to explain why the student's graduate program should not be terminated. If the department cannot provide compelling reasons to explain why the student should continue graduate study, the student's graduate program will be terminated. In the case of termination, reapplication is required to regain matriculation. Should a student holding a University appointment as a teaching or research assistant or fellow be changed to probationary status, the assistantship or fellowship will be terminated. Until a Program of Study is submitted to the School of Graduate Studies, the GPA will be computed using all coursework completed at USU since the prior degree. Once a Program of Study, approved by the student's supervisory committee and department head, is filed in the School of Graduate Studies, the courses listed on it will be used to compute the student's GPA.

12) Incomplete Grades

Incomplete grades (I) must be completed within 12 months (or a deadline set by the instructor), except for research and thesis/dissertation credits. If they are not removed in time, the course must be retaken if it is listed on the Program of Study. Courses cannot be removed from the Program of Study until any incomplete grades are removed. Once you have successfully defended your thesis/dissertation, credits will change from an I grade to a (P) PASS. Continuing Graduate Advisement credits will be assigned a "Pass" grade each term. These cannot be assigned any other grade. It is your responsibility to periodically check your transcript throughout your program and ensure that you have registered correctly, that it matches your approved program, and that you have been graded correctly.

13) Monitoring of Progress

The student's department and the School of Graduate Studies monitor the progress of graduate students. For continued participation in a graduate program, a student must complete requirements in a timely manner. In reviewing a student's progress, several factors will be considered, including demonstrated ability to develop a thesis proposal, independence in the conduct of research, performance on comprehensive examinations, GPA, and special program requirements. Satisfactory progress also involves maintaining the standards of professional ethics and integrity expected in the student's discipline.

Credit Requirements for Degree Program

- a) **(MS students)** The Program of Study *must* include a minimum of 30 semester hours. The Plan A option for a master's degree requires preparation of a thesis. From 6-15 semester credits of thesis research are required. The semesters during which a student registers for thesis credit should correspond as closely as possible to the semesters in which the thesis work is done and faculty supervision is provided. The Plan B option requires the production of a paper. No more than 3 semester credits of thesis research can be used for Plan B.
 - i) If your undergraduate preparation at the time of admission to the graduate program at USU was found to be deficient, additional courses that do not count towards your MS course requirements may need to be included in your Program of Study.
- b) **PhD students)** The minimum requirement for a doctoral degree is 30 approved semester credits in addition to a master's degree, or 60 approved graduate semester credits with no master's degree. Coursework cannot be used for more than one degree. A minimum of 12 dissertation credits is required for a post-master's doctorate and a minimum of 18 for a no-master's doctorate. The semesters during which a student registers for dissertation credit should correspond as closely as possible to the semesters in which the dissertation work is done and faculty supervision is provided.
 - i) Residency Requirement: For the PhD, a minimum of 33 USU credits from an approved Program of Study is required for a 60 credit PhD and 18 USU credits for a 30 credit PhD. At least three semesters, two of which must be consecutive, of full-time registration in residency at USU are required.

Graduate Project Proposals

This is a scholarly work and may be your first attempt at such an endeavor. A well-designed project proposal seldom works out the way that it is conceived on paper, but it can do a lot to ensure your success. A poorly-designed proposal often leads to disaster. A proposal is no more than a thorough statement of the research that you are planning to do. Obviously, it comes before the research, so you are not expected to have results. Nonetheless, some students may have preliminary results from pilot studies, and most will have indications of potential results from studies that have been conducted by others that were found in the literature. Failure to identify these results and discuss them is poor scholarship. If you do not have preliminary results, it is often useful to analyze hypothetical results to see what they may look like. By writing the proposal, it forces you and others to evaluate your ideas, and to see whether or not they withstand critical scrutiny. It is better to identify weaknesses in research plans before the work is started than during the project (or even worse, after the work is completed).

This may be your first attempt at technical writing, something that will become a common professional endeavor. The ability to communicate effectively is critical. Talk to your major professor and committee members about technical writing and look at style manuals for assistance. Give early drafts to your graduate student peers for criticism, and more polished drafts to your major professor for critical review. Many of us are not comfortable writers, and writing is a struggle. Several revisions and major rewrites (usually entailing more than checking spelling and grammar) may be necessary. You should note that most faculty use the proposal as the document that illustrates your writing competency, a requirement to becoming a "candidate."

All graduate students will be required to submit a project proposal to their committee. It provides the student an opportunity to link the specific objectives of the project with the broader problem being addressed. A profitable way of thinking about the proposal is that it should be easily adapted to become your introduction and method sections in your thesis or dissertation. The style or expectation of the proposal is something you should discuss with your advisor as there are no formal requirements on this and different advisors have different expectations.

PhD-level graduate students will be encouraged to prepare and submit one proposal for external funding during their program.

When completed, the proposal for either the MS or PhD degree must be dated and signed by your major professor and supervisory committee. MS students will complete an online form called the **Master's Thesis/Project Proposal Approval** form (found on the School of Graduate Studies website, under Academic Forms). This must be one at least one semester before the defense. This form will serve as the official acceptance of your proposal. PhD students will hold on to the approved proposal and enter the date it was signed, when they complete the **Application for Candidacy** form (completed online and found on the School of Graduate Studies website, under Academic Forms). It is advisable that the proposal be done as early in the program as possible, and before major data collection is started.

Research Seminar

There is a single, department-wide research symposium held once a year, during which ALL new students will present a 15-minute pre-project seminar. PhD students are required to present twice during their program -- their 1st year and again during their 2nd or 3rd year. There are no exceptions to this requirement.

Other items:

- (1) The symposium is held in April of each spring and the date will be published on the Wildland Resources website.
- (2) Graduate classes for that Friday will be cancelled at the discretion of the Department Head, and all current graduate students are required to attend the presentations.
- (3) The symposium will be followed by an evening social.
- (4) All presentations will be oral, 15 minutes in length, (12-minute presentation, 3 minute questions) and use some form of electronic media like PowerPoint.
- (5) All presenting students will be required to attend a 1-evening workshop in spring semester where the process for research question formulation, and presentation basics, will be discussed.
- (6) All students presenting will be required to provide 2 weeks in advance of the symposium a 350 word (maximum) abstract outlining (a) research objectives/hypotheses/questions, including, where appropriate, predictions; (b) an overview of the experimental or sample design; (c) the response design; (d) proposed analytical pathways; and (e) the expected results and world(s) of inference. These will be compiled and passed out at the symposium.
- (7) Faculty, irrespective of whether they do or do not have a student making a presentation, are expected to attend the entire symposium.

This perhaps is the most worrisome prospect for graduate students. However, it is very straightforward prospect, because you are simply giving an oral presentation of your research proposal, which you *have* (hopefully) *already written*. Getting up in front of a group is disconcerting to many people. Just as writing is an important form of communication in the profession, so is oral presentation. This will be a function that you will have to perform frequently in the future. Different speakers have different styles that make them feel more comfortable. Draw upon the courses, lectures, and seminars you have attended. Which styles of presentation makes you feel more comfortable? What types of presentations have you found to best convey the type of information that you will need to communicate? Not all styles are equally suitable for certain types of information. Do you want questions during or only after your presentation? Discuss your presentation plans with graduate student peers and your major professor. Give a practice presentation to a few individuals. Practicing definitely makes for a better presentation. The symposium is scheduled during the spring semester, check with the Department Office for the current schedule if you might have a conflict to make sure you are in attendance.

You will be evaluated on your ability to convey information and respond to questions. Remember, the principal purpose of the seminar is for you to communicate your research plans so that constructive criticism can be given that you can incorporate into the final draft of your research proposal. Sometimes the criticism may appear harsh and not constructive. Criticism is an essential element of scientific inquiry. Try not to take criticism personally and learn how to handle difficult critics in a tactful and professional fashion. For example, do not “pass the buck” by saying someone else said this was acceptable. Take responsibility and realize that you are learning how to conduct research. Furthermore, if you are presented with a question for which you do not have an answer, admit that you do not know the answer and offer to discuss the issue with the questioner after the seminar.

Comprehensive Examination (PhD only)

The Comprehensive Exam is used to assess whether a PhD student is prepared to successfully conduct independent research. This assessment depends upon the student's:

- 1) knowledge in his/her area of specialization and in supporting areas,
- 2) understanding of philosophical perspectives on scholarship, and
- 3) ability to communicate this knowledge effectively.

It is recommended that the Comprehensive Exam be taken by the end of your second (if you have an MS degree) or third (if you don't) academic year. *The exam must be passed no later than 1 year prior to defending the dissertation, and before Candidacy will be recommended.*

The exam may be composed of two parts:

- 1) a set of questions provided by *each* member of the supervisory committee that must be answered by essays, and
- 2) an oral exam, where questions must be addressed verbally.

Written questions must be completed over at least 5 working days, and no more than 10 working days. The scope of knowledge to be addressed in written and oral questions can vary considerably between committees (e.g., all of biology, just ecology, just your area of specialization). Individual committee members may require you to answer the written portion from memory or allow you to use reference material. Both the scope and form of the exam are the purview of the supervisory committee, both collectively and individually. You should discuss this with them so that you know what to expect. A decision as to the acceptability of the essays will be determined within 2 weeks after the last exam is completed. To successfully complete this portion of the exam, two-thirds (e.g. 4 of 5) of your committee members must signify that you “passed” their portion of the exam. This can be accomplished with your original answers or through follow-up work such as a review paper, etc.

Failure to pass the written exam ends the Comprehensive Exam. However, proceeding to the oral portion does not mean that your committee found your written performance to be adequate. Rather, the committee might be uncertain about your written performance, and they may use the oral exam to address questions they might have about your written responses. Ask your major professor and supervisory committee members how they perceived your performance before the oral exam so that you are better prepared.

Many students feel uncomfortable with the oral portion of the exam and free bits of advice may be useful. First, if you do not know an answer, admit it. “Bluffing” is always obvious and can generate even more critical questioning. Second, if you become flustered, ask for a moment to compose yourself. If necessary, ask to go to the washroom or get a drink of water, but do not allow your emotions to get out of control. Third, do not become antagonistic during questioning if you perceive that you are being “badgered.” Always remember that your supervisory committee wants to see you succeed, and they are trying to determine whether their faith in you is justified.

At the end of the oral exam, the committee will ask you to leave the room and wait outside while they discuss your performance and come to a consensus on an evaluation. The evaluation can take 3 forms, and the decision must be communicated in writing to the department head:

- 1) Pass – This means that at least two-thirds (e.g., 4 of 5) of your committee members have recommended that you become a PhD Candidate.
- 2) Conditional Pass – This means that the committee has found deficiencies in your performance, but they believe that you have demonstrated sufficient ability to recommend Candidacy after certain weaknesses are addressed by you. The deficiencies might require you to retake either the written or the oral portion of the exam, take a specific course or courses, complete a set of readings, and/or write an essay or essays on specific topics. While the actions to be taken are at the discretion of the committee, extensive requirements might indicate to the Graduate Academic Review Committee and the department head that a “Fail” rather than “Conditional Pass” is more appropriate. These requirements *must be fulfilled* within the following two semesters of the academic year.
- 3) Failure – The committee can indicate a failing performance with two possible recommendations.
 - i) You must retake the written, oral, or written and oral portions of the qualifying exam. This must be done within a year, if not sooner, at the committee’s discretion.
 - ii) You must terminate your graduate program. If you believe this decision was unjustified, you can appeal in writing to the department head to be allowed to retake the Comprehensive Exam within a year. However, reasonable cause must be given to override the supervisory committee’s decision.

The Comprehensive Exam may only be retaken once. Remember, it must be passed at least 1 year before your dissertation can be defended.

Candidacy

Following completion of all or most courses, successful completion of comprehensive examinations, and approval of a proposal for dissertation research, and at least three months before the final defense, the student must submit an Application for Candidacy form to the School of Graduate Studies. Submission of the candidacy form is a major step in the student’s program, because the committee and department head thereby attest that the student is ready to conduct independent dissertation research, although successful completion of that requirement is not guaranteed.

Candidacy is an indication that your progress to date warrants consideration for a PhD degree. Candidacy is granted after your supervisory committee has formally approved:

- 1) your Program of Study and performance in the courses to date (*Program of Study Form*);
- 2) your Graduate Project Proposal;
- 3) your performance in the Research Project Seminar;
- 4) your performance on the Comprehensive Exam (PhD only) and;
- 5) your request for candidacy (*Application for Candidacy Form*) signed.

Preparation and Approval of Theses, Plan B Papers, and Dissertations

Before beginning work on a thesis, Plan B paper; or dissertation, a student should obtain the Publication Guide for Graduate Students, available online, and the style manual or journal approved by the supervisory committee. These documents will guide the student in the proper preparation of his or her manuscript. Theses and dissertations may be prepared in either monograph or multiple-paper format. One article or article-manuscript may **not** be submitted as a thesis or dissertation.

Beginning August 29, 2011 **ALL** theses/dissertations submitted to the Office of Research and Graduate Studies must include a public abstract. The public abstract is to convey the purpose of the research to the public, so the language of the abstract should be “street language” or layman’s terms. For additional information please see the *Publication Guide for Graduate Students* located on the Wildland Resources website.

Workshops for Thesis/Dissertation Preparation

The School of Graduate Studies offers workshops throughout the year to help you prepare your thesis/dissertation. It is important that you take this workshop as early as possible before you begin your thesis/dissertation. The workshop provides valuable information on preparing your thesis, copyright laws, formatting, and approval process.

It is very noticeable to all reading the thesis if someone has attended these workshops. It is highly recommended. See the Graduate School's website (<http://rgs.usu.edu/graduateschool/>) for dates the workshop is offered. You can obtain a *Publication Guide for Graduate Students* either from the Graduate School's website or the Wildland Resources website (http://qcnr.usu.edu/wild/graduate/current/program_resources).

MS Thesis and Defense

Your thesis (Plan A) or paper (Plan B) represent the culmination of your master's program, and should reflect a degree of professionalism and scholarship indicating that you are ready to seek employment (Plan B) or continue for a PhD in your chosen field of specialization (Plan A). The thesis or paper must satisfy any format requirements established by the Graduate School (see "Publication Guide for Graduate Students") and any additional requirements made by your Supervisory committee. It is your responsibility to identify these requirements and follow them. As in writing your Graduate Project Proposal, it is important that your thesis/paper be well written. Writing a thesis is a time consuming and difficult task, and may require numerous revisions. Have your graduate student peers comment on early drafts, and have your major professor comment on more polished drafts before giving a draft to other committee members.

It is often advantageous to write one or more chapters of your thesis in the journal format(s) where you intend to publish your results. This will teach you how to write for publication, and will facilitate the timely publication of your results. Because the formats of journals and that of the Graduate School are not identical, you will want to work with your advisor to "creatively" write each chapter before the actual manuscript, including tables, appendices, etc. This approach will both satisfy the graduate school requirements and facilitate publication.

Defenses cannot be scheduled until the thesis or dissertation is in "acceptable" format to the committee. That is, title pages, introduction and summary sections, as well as the basic manuscript(s) must be provided to the supervisory committee following the approval by your major professor. Given that these are now available electronically, **the graduate school has become particular about the inclusion of a complete introduction and all statistical tables.**

The thesis (Plan A) is a presentation and discussion of your research results. The thesis needs to be defended in a formal defense with your supervisory committee. Do not schedule your Thesis Defense before you have indications from your committee that they approve your product. You must provide your supervisory committee with the thesis a minimum of **4 weeks** before your defense. Because the School of Graduate Studies requires a minimum 10-working day notice of your defense, this effectively means the earliest you can defend your thesis is **4 weeks** after giving it to your committee members, assuming there are no major problems. It is professional etiquette to discuss with committee members ahead of time when you are planning to give them your thesis. You are likely to avoid potential problems if you consult with individuals or your committee to confirm that they can read your thesis in the allotted time (2 weeks). In some cases, individual committee members may require substantial changes to the thesis before they will sign on the thesis as ready to be defended formally. The *Plans for Publication Form* must be submitted to the School of Graduate Studies prior to the defense.

At least **10 working days** before your defense an *Appointment for Examination Form* should be filled out and submitted to the Graduate School for electronic signature by your Supervisory committee.

The actual defense includes:

- **Defense** – You must give a public seminar that must be **advertised** at least **1 week** prior to its presentation. More than one seminar can be given, but the public seminar constitutes the formal seminar for your defense. Plan on a maximum of 45 minutes, so there is adequate time for questions. The seminar is a formal presentation (powerpoint/overheads) that should be well prepared and should include:
 - 1) a statement of the question that your research addressed;
 - 2) why this question is important, given earlier work by others in the field;
 - 3) how you addressed the question and analyzed the data;

- 4) what weaknesses are in your data and how you might have done the research differently given the experience that you gained; and
 - 5) what conclusions can be reached with your data and how they compare with findings by others.
- **Defense Meeting** – You *must* meet with your supervisory committee within *48 hours* after the Defense to answer questions dealing with your research and/or general knowledge in the field. At this meeting, the supervisory committee comes to a consensus on your performance on the thesis, its defense, and whether you have fulfilled the requirements of your Program of Study. Three decisions are possible:
 - 1) Acceptable – This means that your committee will sign the *Record of Exam Completion Form* (found in defense packet) recommending your being granted an advanced degree. This typically entails minor revision of the thesis and/or passing of courses that you are currently taking.
 - 2) Conditional acceptance – This means that your committee will sign the *Record of Exam Completion Form* (found in defense packet) in the future after you satisfy one or more of the following:
 - a) major revision of the thesis;
 - b) satisfaction of certain actions (e.g., correction in statistics in the thesis, additional readings, etc.) required by the committee, given a deficiency indicated in the defense; or
 - c) satisfaction of a deficiency in your Program of Study (failing grade, incomplete, or course not yet taken).
 - 3) Failure – This means that you will leave the graduate program without receiving a degree. This is an unlikely event, because your major professor and supervisory committee should have indicated the likelihood of this occurring much earlier, and can only be justified by exceptional circumstances (e.g., your having twice failed a course listed on your Program of Study, plagiarism, research fraud, etc.). Without exception, this decision will be reviewed by the department head.

After your committee signs the *Record of Exam Completion Form* (found in the defense email which is sent by the School of Graduate Studies, upon approval of your Appointment for Examination form), this form is forwarded by the Graduate Program Coordinator (GPC) to the Dean of the Graduate School for final approval, at which time you are eligible to graduate.

PhD Dissertation and Defense

Your dissertation represents the culmination of your graduate program, and your passport to future research opportunities; therefore, it must exhibit a degree of scholarship that would permit it to be accepted in the peer-reviewed publications of your field. The dissertation must satisfy any format requirements established by the Graduate School and any additional requirements made by your Supervisory committee. It is your responsibility to identify these requirements and follow them; however, since this work must be publishable, you might select options that will minimize your need to rewrite material before submission to a journal, monograph series, etc.

As in writing your Graduate Project Proposal, it is important that your dissertation be well written. Have your graduate student peers comment on early drafts, and have your major professor comment on more polished drafts before giving a draft to other committee members.

To facilitate publishing your scholarly work in a timely manner, you may want to work with your advisor to “creatively” package your dissertation. Students have been successful with including an updated introduction section from their original proposal before the actual manuscript, and including tables, etc. in appendices. This approach will both satisfy the graduate school requirements and facilitate publication.

The timing and scheduling is the same as it is for an MS student.

- **Defense** – Plan on a maximum of 45 minutes. The seminar is a formal presentation (powerpoint/overheads) that should be well prepared and should include the same statements, questions and conclusions as for the master’s defense.

This seminar is likely to be used by you as your job seminar when you interview for your first professional position.

- **Defense Meeting** – Your supervisory committee will conduct a formal meeting within *48 hours* after your defense in which you answer questions dealing with your research and/or general knowledge in the field. At this meeting, the supervisory committee comes to a consensus on the quality of your dissertation, your performance during the defense, and whether you have fulfilled the requirements of your Program of Study. The same three decisions are possible as for a master's defense meeting.

After your committee signs the *Record of Exam Completion Form* (found in the defense email which is sent by the School of Graduate Studies, upon approval of your Appointment for Examination form), this form is forwarded by the Graduate Program Coordinator (GPC) to the Dean of the Graduate School for final approval, at which time you are eligible to graduate.

Rights to Data and Plans for Publication of Theses and Dissertations

The student and all committee members are required to sign a form outlining the data and copyright of your thesis/dissertation and the plans for publications based on your thesis/dissertation. The form is officially called the **Copyright and Authorship Form**. This form can be submitted at any time but must be submitted to the School of Graduate Studies **after the final defense**.

The rights to data (Copyright) are especially of concern if your thesis/dissertation research is carried out as part of a project with a principal investigator (PI) or in a laboratory using supplies and equipment furnished for you. Under certain circumstances, data gathered for use as part of a research project are the property of a federal, state, or private agency, Utah State University, or the principal investigator(s). Students using such data may be required to waive the right of ownership and/or the privilege of copyrighting the thesis/dissertation. Early in your program, you should discuss the ownership and right to the data to be utilized in your thesis/dissertation with your committee chairperson and, if your thesis/dissertation involves work on a project or in a lab, with the PI or lab director.

The second part of the form specifies plans for publication (Authorship). You must discuss your plans for publication with your chairperson and your committee members to avoid misunderstandings about co-authorship or other acknowledgment as you publish parts or all of your thesis/dissertation. The form also asks for a date by which an acceptable draft will be submitted to your major professor or other USU faculty with whom you will publish. Establishing this timeline is crucial as it is important to get contributions to knowledge into the literature promptly. If the date for submission is not met, the faculty member may prepare the first draft of a manuscript for submission and, consequently, be listed as first author. Your signature and those of your committee members indicate that you have discussed the plans and all are in agreement.

Publishing Before You Defend

Our department encourages graduate students to publish before they defend. It is becoming more and more important that students have publications to attain employment, especially post-doctoral and faculty positions. It is recommended, however, that if the published article is going to serve as a chapter that the student allow their major advisor and supervisory committee at least 15 working days to read the manuscript before it is sent to review. The faculty of the department has agreed that if committee members have not read the manuscript or discussed with you the need for changes within 15 working days that committee member has given up their right to comment. This does not preclude the faculty member from suggesting changes to this chapter as an appendix to the thesis. If the committee member would like an exception to the 15 working day rule, this should be discussed at committee meeting.

Electronic Version

Beginning March 17, 2008 the School of Graduate Studies, in conjunction with the University Library system, is requiring doctoral and Plan A master's students to submit an electronic version of a **completed** dissertation or thesis. The Electronic Thesis and Dissertation Approval form grants Utah State University a non-exclusive license to

archive your work and make it accessible to the public. As the author, you retain ownership rights to the copyright and the right to use it in future works.

If you have questions about the Electronic Thesis and Dissertation Approval form or uploading your digital copy in ProQuest, contact the Merrill-Cazier Library at digitalcommons@usu.edu.

Plan B papers are defended, but are not reviewed by the assistant dean or signed by the dean of graduate studies. Plan B papers must be submitted to the Merrill-Cazier Library.

RESEARCH FRAUD AND PLAGIARISM

Maintaining the highest standards of academic honesty and research ethics is especially important at the graduate level, where students are expected to do original, scholarly work in preparation for future professional and academic roles. Academic dishonesty is defined in the *Code of Policies and Procedures for Students at Utah State University* (April 2002) Article V, Section 3 to include cheating, falsification of information, and plagiarism.

Violations of the above policy will subject the offender to the University disciplinary procedures as outlined in Article VI, Section 1 of the Student *Code*, with the penalties or disciplinary measures to include one or more of the following:

1. **Probation.** Continued attendance at the University is predicated upon the student satisfying certain requirements as specified by the University. Probation is for a designated period of time and includes the probability of more severe disciplinary penalties if the student does not comply with the specified requirements or is found to be violating any University regulations during the probationary period.
2. **Suspension.** Temporary dismissal from the University for a specified time, after which the student is eligible to return. Conditions for readmission may be specified.
3. **Expulsion.** Permanent dismissal from the University.
4. **Honor System Violation.** Assigning a designation with a course grade indicating an Honor System violation involving academic dishonesty.
5. **Denial or revocation of a degree.**
6. **Performance of community service.**

Research is a vital part of the education of most graduate students, and appropriate scientific and research conduct is expected. An allegation of scientific misconduct involving funded research is handled through the Office of the Vice President for Research. If the research is nonfunded, the allegation is handled following the *Code of Policies and Procedures for Students at Utah State University*.

Research misconduct may be determined during a student's program or after the program is completed. If a student is found guilty of research fraud, the penalty may include, in addition to any listed above, correction and reanalysis of data and/or rewriting of the thesis or dissertation, and/or loss of financial assistance.

Responsible Conduct of Research

As of fall 2013, all students entering a doctoral degree program must complete the Research Scholars Certification Program (<http://rgs.usu.edu/compliance/6900/>) offered by the Office of Research and Graduate Studies. This is also required of any MS student who is supported by funds from the National Science Foundation, USDA-NIFA funding, and trainees supported by some categories of grants from NIH, including training grants, development grants, and dissertation grants. Please see the website for current program details, requirements, and certification tracking.

FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS

Several types of financial assistance are available to graduate students in the Wildland Resources Department. These include graduate fellowships, research and teaching assistantships, non-resident tuition scholarships, non-resident tuition waivers, and student loans. Some graduate students are provided opportunities for work on university or consulting payrolls. Most of the WILD graduate students obtain at least part of their financial support through these sources. Formal offers of financial support may be made only after a student has been fully admitted for graduate study by the School of Graduate Studies. All employment procedures will conform with Affirmative Action and Immigration and Naturalization Service policies.

Graduate Assistantships, Fellowships, and Scholarships

Teaching and research assistantships (Graduate Assistantships) are available in the WILD Department. A full-time assistantship is 20 hours per week. In the interest of timely degree completion, graduate students are generally employed by the University for *no more than 20* hours per week. Employment for more than 20 hours per week must be approved by the student's advisor, degree-program department head, and the graduate dean. Teaching or research assistants must be full-time, matriculated students. A 0.25 FTE requires a student to enroll for 9 graduate-level credits; a 0.50 FTE requires a student to enroll for 6 graduate-level credits. Graduate assistants must maintain a cumulative GPA of 3.0 or higher for those courses included on their Program of Study. However, if a Program of Study has not been submitted to the School of Graduate Studies, a cumulative GPA is computed using all of the student's coursework at USU since the prior degree. The GPA is checked by the School of Graduate Studies at the end of each semester. The cumulative GPA on the last 60 semester credits will be used to determine eligibility as a graduate assistant if the student has not yet started the graduate program. Graduate assistants may register for a maximum of 12 credits per semester.

Teaching Assistantships/Graduate Instructors

Graduate students may be teaching assistants or graduate instructors in departments. Teaching loads vary up to a maximum of 20 hours per week and stipends vary depending on the department and the teaching load.

International students may be considered for teaching assistantships if they demonstrate adequate proficiency in English communication, as determined by Utah State University's Intensive English Language Institute, and have participated in the required workshop.

All teaching assistants and graduate instructors are required to participate in a training workshop sponsored by the School of Graduate Studies prior to beginning their assistantships. The workshops help students gain the techniques and skills to be effective instructors in the university environment. The workshop for international students also aids students in understanding the American university culture and in improving communication.

The WILD Department is not heavily involved in teaching large service courses for students from the University at large, and therefore does not have a large budget for teaching assistants. In order to make teaching experience available to the maximum number of students, we typically have one-semester teaching assistantships. These currently pay nominally for assistance in one course. Preference for these assistantships is shown to PhD candidates and those who indicate an interest in teaching after receiving their degree. Non-remunerated opportunities in volunteer teaching are also available.

Research Assistantships

Research assistantships are available for collaborative research and study under individual faculty members who provide the funds and equipment. Graduate students are encouraged to identify faculty whose research and study corresponds with their own area of interest. The ability of faculty to take on research assistants may be limited by several factors, including finances, equipment, and time. Research assistantships are available through individual faculty members who direct research financed by grants and contracts from various governmental agencies and private foundations, and are administered through the WILD Department. Continued flow of these monies depends on expeditious production of results. Accordingly, students associated with a project are expected to meet the same deadlines as the project leaders who initiated the proposal and accepted the awarded grant or contract. The student usually writes a thesis or dissertation from data collected within the project framework. She/he may or may not collect additional data for the overall attainment of the project objectives depending on how closely the thesis or dissertation encompasses overall project objectives.

A student's pay rate and other conditions associated with research assistantships are negotiable between the project leader and the student. The period of service is normally 12 months, with the student assistant spending an average of 20 hours per week on the project. Stipends are potentially taxable. A social security number is required for payment of stipends. International students may experience a delay of several weeks after arrival in obtaining this number. They thus should bring enough funds to pay for their needs during this period.

Insurance

All USU Graduate students receiving a fellowship of over \$10,000/year OR who are employed at .5 FTE (20 hours/week) under the title of Graduate Teaching Assistant or Graduate Research Assistant are automatically eligible for the USU student health insurance plan. This program requires that 80% of the premium be paid by the fellowship program or a grant provided by the student's major professor, with the student responsible for 20% of the premium.

To opt out of the health insurance program, students must provide proof that they are in another equivalent plan.

The insurance coverage extends from approximately August 15th through August 14th each academic year. For further information on insurance, please visit https://www.firststudent.com/school_page/utah-state-university/home-utah-state-university/.

Residency Requirements

All students who began Fall 2007 or later are expected to apply for residency after their first year. We strongly suggest that you learn the requirements for residency your first semester. Check the USU Admissions website, where this information will be posted, along with a link to the application.

<http://www.usu.edu/admissions/residency/>

Fellowships

There are fellowships available to graduate students (for more information go to):

<http://rgs.usu.edu/graduateschool/finances>.

Financial Support Opportunities for Ecology Center Graduate Students

Graduate students working on ecology degrees are eligible to apply for Ecology Center funds (for more information go to): http://ecology.usu.edu/for_students/index

UNIVERSITY AND DEPARTMENTAL POLICIES

Departmental Policies on Office and Equipment Use

Office and Desk Space

The College of Natural Resources is currently very limited in office space, even for faculty. Those who are full-time students and involved with funded research are most likely to have office space assigned to them, yet they may still need to share that space with other students. The department head, in conjunction with the administrative assistant, will attempt to find space for all graduate students.

A system based on financial support and degree sought is used by the WILD Department to place new students on differing priority levels for desk space. These priorities are as follows, in descending order:

- 1) Visiting scientists and scholars
- 2) Full-time research associates, technicians or post-docs
- 3) PhD Candidate – Supported by departmental funds
- 4) MS Candidate – Supported by departmental funds
- 5) PhD Candidate – Unsupported
- 6) MS Candidate – Unsupported

It is the responsibility of the major professor to notify the office staff of the impending arrival of persons requiring desk space. Check with the WILD office staff immediately following your arrival just in case your major professor has not already done so. Time of such notification is used to establish precedence within each priority level. It is thus to the student's advantage to advise the office staff as soon as a change in status is known. If possible, desks will be assigned when new personnel arrive on campus or their name will be placed on the priority list.

Once assigned a desk, it is the student's responsibility to utilize it to the fullest. Office space and desks are at times a scarce resource. If it is seen that desks are used only as book storage areas or as "part-time" study areas, the student will be asked to share his/her desk with another student. People in a low priority category occupying desk space may be displaced by one in a higher priority category without desk space.

Department Office Mailbox Assignments

Each graduate student will be assigned a mailbox in the WILD Office in NR 206. One of the departmental office staff will generally make mailbox assignments. Check also with them for leaving forwarding addresses when required.

Building and Office Key Assignments

As required, authorized students will be given keys and access codes to certain labs and offices. Appropriate keys are obtained by a work order signed by the department head. Students will also be required to make a monetary deposit (\$25) on each key that is received. These deposits are refunded when you return your keys after completion of your program. Like all University personnel, students obtaining keys must follow Key Office regulations (e.g., keys cannot be shared or duplicated, and replacement costs must be paid if keys are lost, etc.). Also note that it is illegal to have unauthorized University keys in your possession.

Use of Audio-Visual and Field Research Equipment

Projectors, cameras, overhead projectors, LCD's, laptop computers, video recorders and players, GPS instruments, theodolites, and aerial photographic equipment are all expensive and difficult to replace. Please take care of them when and if you check them out or use any of this equipment as part of a research project. Any observed problems found on A-V equipment assigned to specific classrooms (e.g. burned-out bulbs, missing or frayed cords) should be reported immediately to one of the departmental office staff. Departmental equipment is not for PERSONAL USE and should always be returned to its proper storage location when not in use.

Use of Departmental Phones and Photocopier

Unauthorized use of any departmental phones is prohibited. Use of this equipment by students can only occur with the approval of the department head and/or one of the department office staff.

The WILD Department photocopier is for the exclusive use of faculty and research teaching personnel (including GRAs and GTAs) and are not to be used for personal needs. Access requires the entry of an account code. Several publicly-available photocopy centers exist for student use (including copying of thesis/dissertation) on campus.

Office of Equity (Title IX and Non-Discrimination)

Utah State University believes in fostering respect and dignity for all members of the USU community and addresses sexual misconduct and discrimination in all its forms. In addition to enforcing USU's policies on non-discrimination and sexual misconduct, we provide prevention education, supportive measures, and other resources to assist USU community members. Sexual misconduct includes relationship violence, stalking, sexual harassment, sexual assault, and discrimination based on gender. Gender-based discrimination includes treating someone differently due to their gender, gender identity/expression, or sexual orientation. Learn more about confidential resources and reporting options at sexualassault.usu.edu. Learn more about USU's definition of consent for sexual activity at consent.usu.edu.

USU prohibits treating anyone differently based on protected classes when it results in a negative impact to the person's employment or educational experience. Protected classes include race, color, religion, sex, national origin, age, genetic information, sexual orientation, gender identity/expression, disability, or status as a protected veteran. University members who feel their rights have been violated, want information, want to file a report, or just need some guidance relating to their course of action, should contact the Office of Equity, located in Old Main Room 161, or call (435) 797-1266, or visit <https://equity.usu.edu/index>.

Drug and Alcohol Use

Utah law prohibits consumption of alcoholic beverages in vehicles and on all state property. Any individual on the list of authorized drivers who is convicted of Driving Under the Influence of alcohol or drugs (DUI), Reckless Driving or any felony in which a motor vehicle is used, either on-duty or off-duty, may have his or her state driving privileges withdrawn, suspended or revoked. No operator of a state vehicle shall transport alcohol or illegal drugs of any type in a State vehicle. Any individual who uses a state vehicle for the transportation of alcohol or drugs may have his or her state driving privileges withdrawn, suspended or revoked. Students' refusals to comply with these laws could leave those responsible with no other option but to report infractions to the proper law enforcement officials.

Grievance Procedure

Students who feel they have been unfairly treated may file a grievance through the proper channels. Since there are various types of grievances and the information is quite lengthy on all the situations, only the website will be listed here. Go to the USU homepage (www.usu.edu) and locate the USU Student Code for details.

Photographs

The Department of Wildland Resources has a photo board for faculty, staff, and graduate students located outside the Wildland Resources main office – NR 206. Please contact the staff in the main office to arrange to have your photo taken for the board.

Software Use and Copying

Generally, copyright law applies to computer software the same as it does to most other forms of works. However, the copyright law permits the owner to make a copy for archival purposes so long as the copy is destroyed once the original software is transferred or sold. In limited circumstances, a copy or adaptation may be made as an essential step in using the program in a computer. For more information concerning copyright law and guidelines, please contact the Utah State University Campus Store at 797-2322.

Travel Authorizations

Official travel in project or private vehicles or any USU car pool usage requires completion of a **Travel Authorization Form**. See your major professor or one of the Business Services Staff (NR 208) for details.

University Vehicle Use

Utah State University Motor Pool is located at 1400 North 900 East. The telephone number is 797-3145. The Driver's Video must be viewed before any employee or student can drive for USU or drive USU vehicles. All drivers must be at least 18 years of age and have a valid driver's license. If driving is an essential function of the job (i.e. in the job description), the video must be seen once a year. If it is not an essential function, the video must be viewed once every two years. To view the driver training and testing go to <https://parking.usu.edu/htm/parking-information/drivers-representation-form>. You should follow the steps outlined. Take the online test and print the "Certificate of Completion." The certificate needs to be on file in the WILD Department main office. If you are a new USU driver you must also complete a "Drivers Authorization" form. Send this form and a copy of your Certificate of Completion of Driver training to the staff in the main office.

The university and department are very sensitive to taxpayer concerns about State vehicles speeding or located at unauthorized places (e.g, private residences, bars, restaurants, etc.). The department realizes that one has to eat, and that occasionally it may be in the public interest to drive a State vehicle home at night when leaving at 5:00 AM, etc. However, any time a State vehicle is not returned to the USU Motor Pool or departmental parking lot at the end of the working day, the driver should be able to document that it is plainly in the interest of the taxpayers of Utah for the student or staff member to have the vehicle where it is. The convenience of the driver has no standing with the legislative auditor. When projects require a vehicle to be parked at a public place (e.g., airport, restaurant, amusement park, fishing hole, etc.), a detriment could be turned into an asset by preparing a sign or note that explains the research and how it helps Utah.

School of Graduate Studies

Each student is responsible to know the policies, regulations, and procedures of the School of Graduate Studies and of his or her department or program, and to see that they are followed and that the timelines are met. The policies and regulations stated in this catalog and in departmental handbooks may be changed between publication dates, and students are responsible to obtain up-to-date information.