



CROP SCIENCES GRADUATE STUDENT HANDBOOK

University of Illinois at Urbana-Champaign

FALL 2017

Welcome to the Department of Crop Sciences

The Department of Crop Sciences is an academic unit with a mission to develop and deliver educational and research programs that foster the creation and adoption of agricultural plant production systems that are profitable, environmentally sound, socially responsive, and sustainable. We are a department that offers exciting opportunities for those that would like a career in the food and fiber production systems of the world.

The Department of Agronomy was established as a unit in 1899. In 1995 the name of the department was changed to Crop Sciences with the merger of the Department of Plant Pathology and most of the faculty formerly in the Department of Agronomy. Interestingly, the Department of Plant Pathology was formed in 1955, drawing faculty from the Department of Agronomy. In 2009, the Horticulture Program was transferred from the Department of NRES to the Department of Crop Sciences. This transfer was initiated by faculty who believed that the combining of personnel and courses would benefit both Horticulture and Crop Sciences since they shared a common mission, had complementary programs, and both disciplines represented basic and applied plant sciences.

We are the international leaders in establishing research that impacts crop production and thus the food and fiber supply necessary to feed and clothe the world. Examples include the Morrow Plots, established in 1876, that demonstrated soils will remain productive for centuries when properly managed; corn breeding programs which ultimately helped provide the foundation of hybrid corn; and soybean breeding programs that shifted soybean from a relatively minor forage crop to an extremely significant crop that supplies protein and oil to improve diets around the world. In more recent years our scientists have advanced biotechnology techniques to improve crop resistance to pests, and are using these same techniques to improve the quality of crops for human and animal consumption. In another area our scientists are working to create plants that will more efficiently produce renewable energy.

Our goal is to build on this rich heritage, continuing to advance the science and to provide a curriculum that allows graduates to contribute to that advancement and/or use of new knowledge. The future is bright for graduates of the Crop Sciences program. They have historically had more than one job opportunity available upon completion of their studies. This will likely continue as the need for well-trained Crop Scientists will only increase as society pushes for improved efficiency of the use of natural resources, including all that are used for crop production.

Our graduate programs include the Master of Science degree, Online M.S. degree, and Doctor of Philosophy degree. Candidates for these degrees have an opportunity to be trained by and work with professors that have attained international reputations. Such training enhances the opportunities for graduates to attain positions of leadership in the profession.

Illinois is blessed with a great environment, both soils and climate to produce crops needed to supply feed and fiber to the world. To sustain that environment will require many well educated crop scientists. The faculty of the Crop Sciences Department are poised and ready to help students whether on or off campus, to attain the knowledge necessary to become leaders in the profession. We extend our warmest welcome to all and invite those that have an interest in crop sciences to explore our web site at <http://cropsci.illinois.edu/> and to contact us for more information about the Department of Crop Sciences at the University of Illinois.

Best Regards,
Germán A. Bollero
Department Head



Germán Bollero
Department Head

THE DEPARTMENT OF CROP SCIENCES

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ERML = Edward R. Madigan Lab • PSL = Plant Sciences Laboratory • TH = Turner Hall • National Soybean Research Center = NSRC

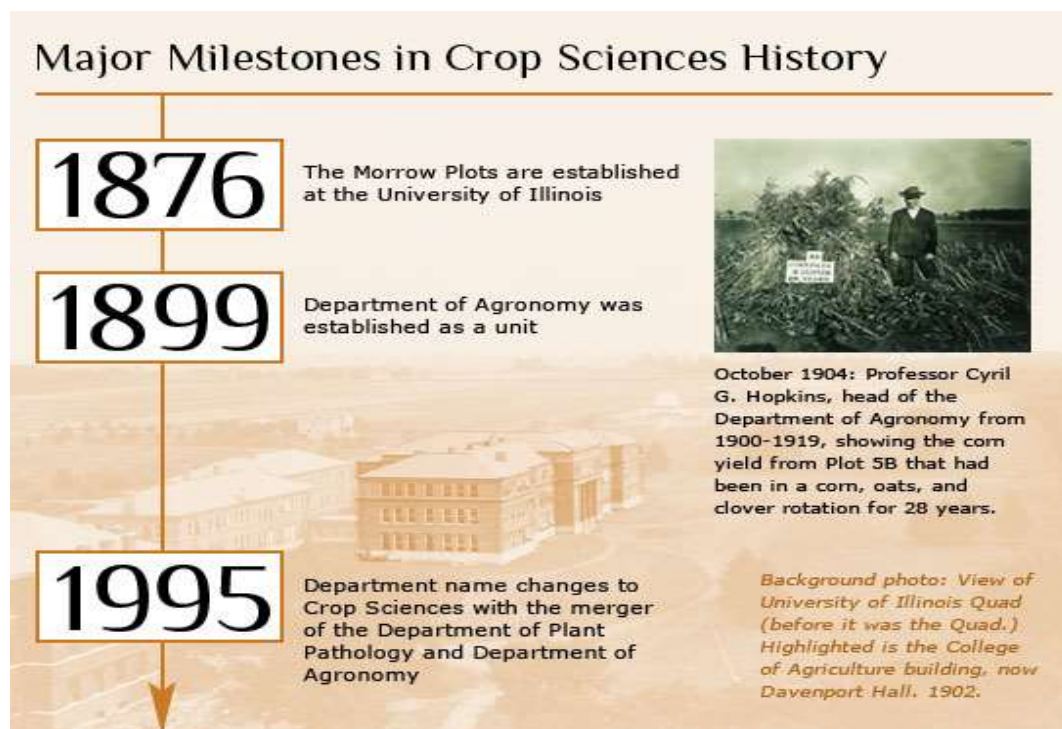


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GRADUATE EDUCATION – What Is It?

Graduate education provides the opportunity to gain a deeper knowledge of your subject area than was possible as an undergraduate. It also familiarizes you with the academic, research, and professional culture of your field of study. As a graduate student, you have opportunities for activities and experimentation that are unlikely to recur. We encourage you to take full advantage of this relatively short period of transition, as you become a teacher, researcher, extension specialist, consultant, or other related professional.

You alone can decide on the extent and quality of the educational and research experience gained from your graduate program. Your initiative, more than anything else, will dictate how much you will learn and how far and in what direction this training will take you. Unlike undergraduate studies, the graduate program is not based entirely on the ability of the student to earn good grades in organized course work. You are expected to develop some appreciation for the broad field of Crop Sciences, and this will be accomplished through attending seminars, talking with faculty and graduate students who work in other specialties and working closely with the faculty, staff, and other graduate students who work on research related to your interests. What you get out of this experience in terms of preparation for a stimulating professional career will largely be determined by what you put into it. Always keep in mind that you can never really know what experiences will be valuable in the future. Consequently, the more complete and varied these experiences are, the better trained and qualified you will be.

The schedule of course work you will complete is developed by you and your Guidance Committee, rather than being specifically prescribed. Talk with your adviser and committee about your interests and career goals as you prepare your plan of study so that they can provide you the best advice possible on the courses you should take. Remember that a vital part of your graduate education is developing and conducting your research program. Bear in mind that as you proceed through your program of study and related activities, all of your interactions with others, particularly with your adviser and committee, are influencing your future letters of recommendation. The strength of these recommendations will depend upon you.

Each graduate student will typically specialize in a single area of academic research, but most faculty members have discipline training and backgrounds that enable them to provide guidance in more than one specific area. Students are encouraged to get to know and seek technical help from as many of the faculty as possible, whatever their specific area of interest is.

ELEMENTS OF A GRADUATE PROGRAM

Several specific elements comprise a graduate program of study. Within the Department of Crop Sciences, the most important elements are the major adviser, the Guidance Committee, the Plan of Study and the Research Proposal, the annual review process, and the preliminary and final examination.

Major Adviser

The key individual in the development of the graduate program is the major adviser or major professor. The major adviser is responsible for helping the student plan a program of study that will provide the opportunity to reach a prescribed level of excellence. It is important to recognize that the adviser gives advice and counsel and but does not "carry" the student. It is the responsibility of the student to achieve the prescribed level of excellence with the adviser directing the way.

The selection of the major adviser is based on the interests and goals of the student, the source of funds the student is provided, the current workload, interests of the faculty of the department, and the availability of facilities.

A student may change major advisers during their program of study only after a complete review of the situation by the Graduate Studies Committee. See the Graduate Coordinator to initiate the process. The Graduate Committee will make recommendations to the Graduate Coordinator who will consult with the Department Head in order to make a final decision. However, it is considered desirable, although not required, for a change in advisers to occur between the M.S. and Ph.D. degrees if the student continues in Crop Sciences.

Guidance Committee

During the first semester of enrollment, a Guidance Committee will be selected (Form A). The composition of this committee will be determined by the major adviser in consultation with the student. One member of the Guidance Committee must be a tenure track faculty member in Crop Sciences. The M.S. committee shall consist of at least three members, one of whom is the major adviser. The committee for Ph.D. candidates is composed of at least four members, including the major adviser. At least three of these must be members of the Graduate Faculty, and at least two must have tenure. Graduate Faculty who have retired or resigned with tenure within the past five years can serve as tenured faculty members if approved by the Department Head. Usually, the Guidance Committee also serves as the Preliminary and Final Examination Committees (See the Ph.D. PROGRAM section Preliminary Examination for Examination Committee requirements.) Adjunct faculty can serve as non-tenured committee members. Faculty or experts from other institutions can serve as non-tenured committee members after approval of the adviser and department. To seek approval, prospective committee members must supply a CV to the adviser and the adviser must submit this and a letter of justification to the department for review.

It is the function of the Guidance Committee to assist the major adviser and the student in developing an appropriate course of study and to review the detailed Research Proposal, once the preliminary plan has been outlined by the major adviser and the student. The role of the committee members is to offer helpful suggestions toward the most effective execution of the research effort. The Guidance Committee is required to sign approval of both the Research Proposal and the Plan of Study.

REQUIRED COURSES CPSC 594 – 598

CPSC 594, Graduate Student Professional Orientation

Candidates for the M.S. and Ph.D. programs in Crops Sciences **are required to complete CPSC 594**. This course provides an overview of the Department and Crop Sciences graduate programs. Students will be required to prepare a tentative plan of study for their degree and generate a short proposal for their thesis (or special problems) research project. The course will cover a range of topics of interest to incoming graduate students including use of the library, statistical consulting, and ethics in Academia and research. The course will be in an asynchronous online format to be completed in one semester, and will be offered for one credit hour at the 500-level. The course will be offered during the spring and fall terms. Incoming students are required to take this course in their first semester of graduate school.

CPSC 598, Seminar Series

Candidates for the M.S. and Ph.D. degrees in Crop Sciences are **required** to register each semester for 1 hour credit in one of the two sections crops [C] or genetic engineering [G] of Crop Sciences 598. A student may be exempted from seminar for the semester or register for a seminar other than Crop Sciences 598 only upon the recommendation of his/her adviser and approval of the **Graduate Coordinator**. Approval should be obtained prior to registration. **All students are required to present a seminar on their thesis research during the last or next to last semester of their M.S. and Ph.D. programs.** Seminar chairpersons should solicit seminars by faculty in the Crop Sciences and other UIUC departments, and a budget will be available from the Department Crop Sciences for inviting several outside speakers for each of the three sections. Chairpersons will solicit student input in the selection of speakers.

1. Regular attendance at seminars in the section of Crop Sciences 598 for which the student is enrolled is expected of all students.
2. **Students who will present a seminar should enroll in the section C2 or G2 and will receive a letter grade (A-B). Students not presenting a seminar should enroll for the section C1 or G1 and will receive an S/U grade.**
3. To receive a grade of S, a student may not be absent from more than two seminars during the semester without an excuse from the instructor.
4. Students who present a seminar during the semester will be graded on the quality of the research presentation and will not be based on research accomplishments. Criteria for grading will include rationality of organization, clarity of oral delivery, preparation of suitable slides or other audio-visual aids, and overall effectiveness of the presentation. Grades will be based on evaluations from at least three persons present at the seminar. Preferably, two faculty members and two students from a given course section will be designated at the start of the semester and charged with evaluation of all student presentations given in that section during the semester. Regular attendance at other seminars presented during the semester is expected and will also be a factor in grading. The faculty member formally assigned to teach the section will assume final responsibility for grading.

The student shall be evaluated in a manner consistent with other University classes which require oral delivery as the primary product/output of a student's effort. Both student and other faculty input is welcome to assist the seminar chairperson who shall assign the grades.

Plan of Study

During the first semester of any graduate program, the student and the major adviser will prepare a draft Plan of Study. This plan will include a schedule of courses to be completed and a timetable of the proposed total program. Only courses at the 400- and 500-level will apply toward completion of a graduate program. During the first or second semester, after the student meets with his/her Guidance Committee, changes in the plan and recommendations by the committee will be included in a revision. This revised plan must then be signed by all committee members and submitted to AE-106 Turner Hall by no later than Reading Day of the second semester of enrollment. In order to complete the degree requirements in a timely manner, it is the responsibility of the student to take into consideration which semester(s) these courses will be available. Some courses are only offered in alternate years, or may be canceled for other reasons, such as low enrollment or faculty sabbatical leaves.

Annual Graduate Student Progress Review for all graduate students within the Department of Crop Sciences – SPRING 2018

In the beginning of the spring term of each academic year, each graduate student in Crop Sciences is required to conduct an Annual Progress Review. Any student, M.S. or Ph.D., who has finished at least one semester of graduate study in the Department is required to complete this review.

Goals

The Annual Graduate Student Progress Review is meant to achieve the following goals:

1. Help students summarize their accomplishments and challenges and document them for later use.
2. Ensure that each student and their advisor/s have communicated about and agreed upon past progress and future directions.
3. Determine the stage of the student in their program and determine if they are making appropriate progress.
4. Supply data for reporting of departmental activities.
5. Provide documentation from which the Graduate Studies Committee can identify students to nominate for scholarships, awards, and other forms of recognition.

GRADUATE DEGREE PROGRAMS

The Department of Crop Sciences was formed in 1995 by merging faculty from the former Department of Plant Pathology, crop scientists from the former Department of Agronomy, and entomologists interested in integrated pest management from the former Office of Agricultural Entomology. In 2009, the Horticulture faculty from Natural Resources and Environmental Sciences joined the Dept. of Crop Sciences. Graduate degree recipients from the former departments hold positions of leadership throughout the world. Our degree programs provide state-of-the-science education to match nearly every interest and career aspiration in crop sciences. The graduate degree programs available in the Department include the M.S. degree program (10KS0030MS on-campus), M.S. Bioinformatics degree program (10KS5100MS), Online M.S. degree program (10KS0030MSU off-campus), and the Ph.D. degree program (10KS0030PhD).

Program Areas

Integrated Pest Management. Integrated pest management (IPM) can be described as the intelligent selection and use of pest-control actions to promote favorable economic, ecological, and sociological consequences. Scientists involved in agricultural pest management programs try to optimize pest control by using multiple pest-control tactics. By maintaining pests below economic injury levels, scientists strive to provide protection against pest damage, ensure a competitive agriculture, and enhance environmental stewardship.

Biometry. The primary objective of our biometry (statistical) research efforts is to help all biological researchers obtain valid answers to their research questions. The unavoidable variability inherent to biological and physical experimentation must be separated from known sources of variation in order to evaluate and interpret results. As an example, biometry is important in risk assessment and management approaches to integrating agronomic, sociological, and statistical aspects in determining the optimal rate of fertilizer usage.

Bioinformatics. Bioinformatics is a new discipline that addresses the need to manage and interpret the data that is being massively generated by the "omic" revolution (genomics, proteomics, metabolomics, etc.). This discipline represents the convergence of biology, computer sciences, statistics, and information technologies, and encompasses analysis and interpretation of biomolecular data, modeling of biological phenomena, and development of algorithms and statistical approaches. Bioinformatics is important to the crop sciences because it plays an important role in the management and exploitation of microbial, plant and animal genomic resources.

Crop Production. The crop production group investigates and compares commonly used and alternative crop production practices and systems and evaluates them with respect to crop yield, profit, environmental and ecological consequences, and agricultural sustainability within the central Corn Belt. The program in environmental sciences endeavors to understand the impact of agricultural practices on the environment and the impact of the environment on agriculture. The overall goal of the graduate option in environmental sciences is to improve agricultural profitability while decreasing adverse impacts on the environment, both local and global.

Horticulture. The horticulture group investigates sustainable specialty crop production and urban agricultural systems. This includes research on vegetables, pomology, small fruits, ornamental trees and shrubs, floricultural crops including bedding plants, and turfgrasses. Specialities include multifunctional perennial horticultural cropping systems, greenhouse and high tunnel crop production, perennial tree and grass species for bioenergy production, vegetable and fruit breeding for improved flavor and nutritional quality and resistance to pests, and improving post-harvest fruit and vegetable quality.

Plant Breeding, Genetics, and Cytogenetics. Plant breeding, genetics, and cytogenetics is the science of applying genetic principles to improve plants for human use. It impacts the life of every individual in the world on a daily basis and has been enormously successful in achieving improved yields, disease resistance, nutritional quality, industrial uses and landscape/horticultural aesthetics. Plant breeding faces future grand challenges due to projected increases in global population, increased consumption of protein as the standard of living increases, limits to production resources such as land, water, and climate change.

Plant Molecular Biology and Physiology. Faculty in plant molecular biology and physiology are exploring the genetic and molecular basis of important plant traits such as seed composition, disease resistance, stress tolerance, and mineral nutrition. In studying the cellular processes that control these traits, we seek to generate both basic scientific knowledge and new strategies for crop improvement.

Plant Pathology. Plant pathologists study plant pathogens and pests and how their interactions with plants and environments lead to disease susceptibility or resistance. Pathogens causing diseases in plants include bacteria, fungi, nematodes, viruses, and other microbes that adversely affect plant physiology. The knowledge produced by plant pathologist about the etiology of plant diseases leads to a better understanding of how to manage plant disease problems. As such, plant pathology is an integral part of sustainable, environmentally friendly agricultural production systems.

Sustainable Landscape Design. The Sustainable Landscape Design concentration offers students the opportunity to develop innovative solutions to current environmental problems through the transformation of the landscape. The program bridges cultural and environmental dimensions by considering opportunities for the landscape to provide a wide range of ecosystem services (benefits humans derive from ecosystems) such as storm water management, carbon sequestration, microclimate control, community engagement, and human mental restoration. These “multifunctional landscapes” may also include food production, overlapping somewhat with the Urban Agriculture & Local Foods concentration. The graduate program in Sustainable Landscape Design is quite flexible, allowing students to take courses across multiple disciplines such as environmental science, ecology, landscape architecture, and environmental psychology.

Urban Agriculture and Local Foods. The recent development of a new concentration on Urban Agriculture and Local Foods is the result of growing interest from students, researchers, and the general public regarding food systems. The production of fresh food for local consumption has the potential to improve community food security, reuse waste materials as resources, reduce the impacts on the environment, and revitalize neighborhoods. As an alternative land use, urban agriculture integrates multiple functions into densely populated areas where many consumers live. In many ways, this is a new frontier for horticulture, agriculture, and plant science disciplines. The graduate program in Urban Agriculture & Local Foods is quite flexible, allowing students to take courses across multiple disciplines such as sociology, food science, geography, and planning.

Weed Science. Weed science is a very dynamic field of research integrating cultural, mechanical, chemical, and biological management techniques to obtain economically and environmentally sustainable weed management systems.

GRADUATE DEGREE PROGRAMS WITHIN THE DEPARTMENT OF CROP SCIENCES

M.S. DEGREE PROGRAM

Master's degree candidates develop a solid understanding of their major field of study and use these skills to conduct and critically assess scientific research. The master's degree program also prepares students for more advanced research. The average duration of the M.S. program is two and one-half years.

Plan A – Thesis Option

The Plan A, Thesis Option, requires that the student satisfactorily complete a minimum of 32 semester hours. The 32 hours must meet the following five requirements:

1. A minimum of 20 graded hours of graduate level coursework in Crop Sciences, Plant Pathology, Agronomy, Horticulture or closely related sciences approved by the student's Guidance Committee.
2. Satisfactory completion of CPSC 594: Graduate Professional Orientation.
3. Presentation of thesis research in the CPSC 598 Crop Sciences seminar series, (required) and a letter (A-B) grade is earned. This 1 hour of graded credit is counted toward the required minimum of 20 hours of graded coursework.
4. At least 4 hours of graded coursework at the 500-level in addition to the courses in requirements 2 and 3 listed above.
5. A grade of satisfactory for up to 12 hours of Crop Sciences 599, Thesis Research. This grade is assigned upon deposit of the M.S. thesis.

Graduate Faculty Guidance Committee

A Graduate Faculty Guidance Committee is comprised of at least **three** members of the graduate faculty, with the major adviser as chairperson. The major adviser and student will identify suitable members for this committee. The student will ascertain whether each committee member is willing to serve if invited. Form A (page 54) now incorporates the selection of the Guidance Committee and the Graduate Student Plan for Coursework. This form should be completed by the student with approval of his/her major adviser during the first semester of study.

Final Oral Examination

The student's final examination is an oral exam and is held after submission and approval of the thesis by the major adviser. It involves a PowerPoint presentation and defense of the student's thesis research to their Guidance Committee. The thesis draft must be sent to the committee members at least 10 days prior to the date of the final exam. The final examination committee, generally the same as the student's Advisory Committee,

will determine the scope and format of the final examination in advance. To clarify committee expectations, the student is urged to visit with each committee member prior to the examination.

At the conclusion of the examination, the committee will sign off on the Thesis/Dissertation Approval form, f.k.a. Certificate of Committee Approval form, which is then taken to the Graduate Studies Office in Turner Hall. The possible outcomes of the M.S. final exam are pass, fail (and elimination from the program), or incomplete. If the student receives an incomplete, the M.S. examination must be repeated within three months. The final examination is usually given during the final semester the student is enrolled as an M.S. candidate. It is not a requirement for the M.S. degree student to be registered at the time of the final exam unless the student is an international student. International students must follow the guidelines set forth by the International Student and Scholar Services office.

Preparing and Depositing the Thesis

Preparation of your thesis, including typing, production of illustrations, and duplication are personal expense responsibilities. Sometimes illustrations can also be used in manuscripts for publication. In those cases, the cost of duplication for the manuscript may be a project expense. Your adviser will make that determination. Original data remains in the custody of your major advisor. The Graduate College requires all graduate students to submit an electronic MS thesis or PhD dissertation (ETD) for review by and deposit with the Thesis Office. Students must format their theses according to Graduate College thesis requirements, (the Department's thesis formatting requirements are the same), and obtain departmental approval from the Graduate Studies office. If there are not any formatting changes to be made, the Departmental Thesis Reviewer will then obtain the Department Head's signature and upload the fully signed Thesis Approval form to the Graduate College portal. When this important step has been completed, then the student may submit their thesis electronically to the Thesis Office for deposit. Both the student and the Grad Studies Office will receive an email message. This message may state that there are additional formatting changes to be made or that the deposit is now complete.

The Graduate College thesis requirements can be found at: <http://www.grad.illinois.edu/thesis/format>. A brief informational video about the ETD process is now available from the University Library in two formats. Please refer to this webpage for the link to view this video: <http://www.grad.illinois.edu/video> .

Please note that there are strict deadlines each semester in which the Graduate College has set for completing the thesis deposit process. This includes having all requested changes made and the Thesis/Dissertation Approval form uploaded to the Thesis Office website.

If you are ending graduate study at the M.S. level and have finished all coursework, domestic students do not have to be registered to deposit their thesis. **International students must be registered until they deposit unless they will be depositing from their home country.**

Applying for Graduation (Adding your Name to the Degree List)

In order to receive a degree, a student must apply to be on the degree list for the appropriate graduation date. Students should apply for graduation using the UI-Integrate Self-Service system. Deadlines for applying to be on the list for each graduation date are noted at: <http://www.grad.illinois.edu/general/calendar/current>. Applying for graduation is not the same as applying to participate in departmental or campus commencement ceremonies. Please note that if you postpone your graduation to the next semester, you must sign up again.

Graduation

Graduation for M.S. and PhD students can take place in May, August, or December. Consult the Graduate College Calendar <http://www.grad.illinois.edu/general/calendar/current> for the dates and deadlines for the specific term during which you plan to graduate. The campus-wide graduation ceremony held by the University of Illinois and the graduation ceremony held by the College of ACES is in May. Students who graduate in August or December will be invited to participate in the graduation ceremony for the following May. Participants can then choose to attend the graduation ceremonies. The College of ACES ceremony and the campus-wide ceremony is held at the Assembly Hall on Saturday and Sunday of the same weekend in Mid-May. Graduation tickets are sent by the College of ACES Placement office directly to those graduates on the graduation list.

Request for Certification of Degree Letter

A student who has fulfilled all of the degree requirements before the next conferral date may need certification for employment or to meet visa requirements. To request a degree certification letter, the student should use the Degree Certification Letter Request form at www.grad.illinois.edu/sites/default/files/pdfs/cdlrequest.pdf. A student who has not deposited the thesis with the Graduate College (when deposit is required), who owes money to the University, or who is enrolled in any course other than research credit **cannot** receive a degree certification letter.

Time Limit

The Graduate College requires M.S. degree students to complete all requirements for the degree within five calendar years after their first registration as a degree-seeking student. However, within Crop Sciences there is an expectation that the M.S. degree will be completed within two and one-half calendar years. Upon entry in the Graduate College, you are assigned an Expected Graduation Date (EGD). Enrollment beyond the EGD is allowed only after petitioning for a time extension. Please note that M.S. students are not required to be enrolled the semester they take give their Oral Examination, deposit their thesis, or graduate.

Students may request an extension of this time limit through the Graduate College Petition process. If coursework to be used toward the degree is more than five years old at the time of degree conferral, students must petition the Graduate College asking that the course work be accepted for the degree. The petition must include an explanation from the department regarding how the student's knowledge in the areas covered by the old coursework meets current standards. This justification is needed for degree certification, and the petition can be filed up to one year prior to the degree conferral date. With written approval of the Graduate College, a Department may set different time limits for completion.

M.S. Sequence of Program

- Application complete, meet admission requirements, major adviser and funding identified.
- Admission recommended and approved by Graduate College Admissions Office.

- Completing all necessary steps for stipend payment for research assistantships with Human Resources Manager in AE-108, if applicable. Acceptance of Fellowship with Graduate Studies Office, AE-106, if applicable.
- Registration as a graduate student (including CPSC 594, CPSC 598 and CPSC 599). International Students cannot register until after they “check-in” with the International Student and Scholar Services Office, (ISSS).
- Complete “Key Request” form to obtain keys to lab and/or desk area and have advisor contact Business Office for approval and provide information on what keys are needed.
- Selection of Guidance Committee during the first year of study and completion of FORM A, (page 54).
- Preparation of Study and Literature Review and Research Proposal with signature of Major Adviser for approval to fulfill class requirement in CPSC 594.
- Approved Plan of Study submitted to the Crop Sciences Graduate Office (AE-106 Turner Hall) by Reading Day of the second semester enrolled.
- Completion of Annual Academic Progress Review.
- Schedule appointment with Graduate Studies Office for degree audit.
- Completion of at least 20 hours graded graduate level coursework and 12 thesis research hours.
- Schedule appointment with Graduate Studies Office to review ending degree requirements.
- Begin composition of thesis when research has been completed.
- Adding name to pending degree list in U of I Integrate Applications System.
- Title page check Thesis Office - <http://www.grad.illinois.edu/thesis/format-title-page> (Plan A only).
- Schedule Final Oral Examination with student’s Faculty Guidance Committee.
- Contact Graduate Studies Office with date of exam, members of your committee, and thesis title for preparation of Thesis/Dissertation Approval form.
- Submit copies of thesis to each member of Guidance Committee for review at least 10 days in advance of the Final Oral Exam.
- After passing Oral Exam, finalize thesis if applicable.
- Schedule Departmental Format Review with Graduate Studies Office.
- Electronic submission of thesis to the Graduate College Thesis Office.
- Resign research assistantship or fellowship if applicable.
- Completion of Crop Sciences Exit Interview with Director of Graduate Studies, John A. Juvik, juvik@illinois.edu; THIS NEEDS TO BE ADDED to My.ACES.
- Clean out desk and study area prior to leaving campus.
- Return all office and lab keys to the Business Office in AW-101.
- Graduate.

M.S. Candidates Continuing on to Ph.D. Program

Students nearing completion of the M.S. degree but wish to continue on to Ph.D. program in Crop Sciences should contact the Graduate Studies Office to complete the a request for a “Curriculum Change” that is listed on the Student Request.. This form can be found at: <http://www.grad.illinois.edu/gsas/gradpetition>. Since you’ve already completed the University’s graduate application, you do not need to complete another one or pay the application fee. Please check with the Graduate Studies Office for details about this process. In addition, an updated CV or resume and a new Statement of Purpose are required from the continuing student. The supporting letters of reference that document the student’s potential as a Ph.D. candidate must be submitted to the Graduate Studies office by the current M.S. adviser, the prospective Ph.D. adviser, and one additional M.S. committee member. The Graduate Studies Committee will make a recommendation concerning admission to Ph.D. candidacy after reviewing the student’s progress as a M.S. candidate and the supporting letters. The Graduate College must approve this curriculum change before a student’s status will be changed. After approval, the student must develop a new Plan of Study for the Ph.D. program. Please refer to the degree requirements for the Ph.D. program.

The adviser is responsible for notifying the Human Resources Manager of any change in graduate status before the stipend rate will be adjusted to the “Ph.D. level ” rate. Additionally, the student must fulfill the M.S. degree requirements before the new rate will become effective. International students continuing in a Ph.D. program must notify the International Student and Scholar Services. They will need to complete forms in reference to their change of study and update their visa if necessary.

CPSC MS student transfer into CPSC PhD program under the same advisor without thesis completion

The department will consider the transferal of MS students into the PhD program without completion of the MS thesis with the following stipulations and protocols:

- The student must have completed 20 hours of graded course work in the MS program and maintained a GPA of 3.5 or greater.
- The faculty advisor of the student must submit a request to the Graduate Studies Coordinator for their student to move into the PhD program and provide a letter of justification and support for the student.
- The student will be required to complete and pass a Departmental Qualifying Examination
- The student will submit to the Graduate Studies Office an up-to-date CV.
- The Graduate Studies Office will provide all members of the Crop Sciences Graduate Studies Committee with the letter from the advisor, the students CV, the results of the student’s qualifying examination, and a list of the student’s courses and grades. The committee will review these documents, discuss the qualifications for the student’s transferal and vote for or against the transferal. A recommendation for approval will require a 2/3 majority of the committee votes.
- The committee’s recommendation on transferal will be communicated to the student and PhD advisor.

Plan B – MS Degree, Non-thesis Option

The Plan B non-thesis option is rarely used for on campus M.S. degree students. A Plan B non-thesis student must satisfactorily complete a minimum of 32 hours of graduate level course work that meets the following requirements:

1. A minimum of 32 graded hours of formal coursework in Crop Sciences, Plant Pathology, Agronomy, or closely related sciences approved by a Guidance Committee.

2. At least 12 of the 32 graded hours of graduate study must be at the 500-level. Crop Sciences 598 can be used, if the student presents a seminar and receives a letter (A-C) grade. Credit in thesis research (Crop Sciences 599) **cannot** be counted toward a non-thesis degree.
3. No more than 4 hours may be for Crop Sciences 593, Independent Study, under the supervision of a member of the Crop Sciences faculty. Independent study may consist of a field or laboratory, or a library research problem, or some combination of these depending on the interests of the student and the availability of facilities.
4. The student must select a Guidance committee and complete FORM B, Non-thesis MS Degree Student (**page 55**). This form should be completed by the student with approval of his/her adviser during the first semester of study.
5. The student must pass an Oral Examination. The Oral Examination committee (generally the Guidance committee members) will determine the scope and format of the Oral Examination in advance. To clarify committee expectations, the student is urged to visit with each committee member prior to the examination. Decisions of the Committee on the examination must be unanimous. If the student fails the oral examination, the student has the opportunity to retake the exam once.

MASTER OF SCIENCE IN BIOINFORMATICS CROP SCIENCES CONCENTRATION

The Department of Crop Sciences offers a concentration within the campus-wide M.S. program in Bioinformatics that focuses on the agricultural and life sciences.

The discipline of Bioinformatics addresses the need to manage and interpret the data that is being massively generated by genomic and proteomic research. This discipline represents the convergence of biology, computer and information technology sciences, and encompasses analysis and interpretation of biomolecular data, modeling of biological phenomena, and development of algorithms and statistical approaches. With current technology, scientific discovery occurs in a global arena and data are stored and archived massively in databases, disseminated through cable or wireless conduits, and analyzed. This includes information on genomes, biomolecules, biomolecular circuitry, and biological processes at the molecular, cellular, organismal and population levels. Our world expects substantial pay-offs from the analysis of multi-dimensional data structures, including proactive control and clear understanding of chemical, biological and cosmological processes. Ultimately, we expect a better life. The College of Agricultural, Consumer and Environmental Sciences (ACES) and the Department of Crop Sciences have a comprehensive mission that relates to agriculture, food, and environment, and is driven mainly by a human-community dimension. This involves addressing important issues in biology. Within this framework, bioinformatics plays an important role in the management and exploitation of microbial, plant and animal genomic resources.

Students interested in our Bioinformatics program may come with undergraduate training in one of the following areas: (a) biological and agricultural sciences, (b) statistical, mathematical and computer sciences, (c) informatics and engineering sciences. Graduates from the bioinformatics program will be able to integrate basic and applied concepts in the three areas and applied them to biotechnology and medical research. The application form and instructions can be found at: <http://www.grad.illinois.edu/admissions>.

Degree Requirements

The Crop Sciences concentration within the M.S. in Bioinformatics is offered in both thesis and non-thesis versions. The thesis option requires a minimum of 32 hours, including 28 hours of coursework with at least 12 hours at the 500-level and 8 hours within the Department of Crop Sciences. Of the 32 hours, a minimum of 12 hours must be within a General core, equally distributed between Fundamental Bioinformatics, Biology, and Computer Science courses. The General core complies with the requirements of the campus-wide Master of Science in Bioinformatics. In addition, a minimum of 7 hours of courses in Computational, Quantitative and Statistical Biology must be completed, together with a minimum of 5 hours of electives. Within the Computational, Quantitative and Statistical Biology core, the students must take CPSC 440 (Applied Statistical Methods I) or CPSC 540 (Applied Statistical Methods II). No double counting is possible; the same course cannot be used to satisfy the General core and the Computational, Quantitative and Statistical Biology core requirements simultaneously. The courses approved for the General core and the Computational, Quantitative and Statistical Biology core are listed below. Electives can be satisfied with any graduate-level course; however, students must select elective courses in consultation with their departmental advisor and are strongly encouraged to select from among courses offered by the Department of Crop Sciences. Students must also complete a minimum of 4 hours of thesis within Crop Sciences research (CPSC 599). Students are required

to register each semester for 1 hour of seminar in one of the sections of the seminar series in Crop Sciences. A student may be exempted from seminar for the semester or register for a seminar in another department upon the recommendation of his/her advisor and approval of the Director of Graduate Studies. Students are required to present a seminar on their thesis research during the last semester of their study program.

With the permission of their advisor, students in the Department of Crop Sciences may choose to pursue a non-thesis option within the M.S. in Bioinformatics. The non-thesis option requires a minimum of 36 hours with the same course requirements specified in the thesis option. Supplementary requirements towards satisfying the 36 hours include an additional minimum of 3 hours of General Core courses, an additional minimum of 3 hours of Computational, Quantitative and Statistical Biology core courses, and an additional minimum of 3 additional hours of elective courses, for a minimum total of 9 hours. The student may incorporate supervised research experiences including internships and projects to complete the remaining required hours of the non-thesis option. No course can be used to satisfy more than one requirement. For a complete listing of the courses for this program, please refer to the following web page: <http://cropsci.illinois.edu/content/master-science-bioinformatics-crop-sciences-concentration>

M.S. Bioinformatics Sequence of Program

- Application complete, meet admission requirements, major adviser and funding identified.
- Admission recommended and approved by Graduate College Admissions Office.
- Completing all necessary steps for stipend payment for research assistantships with Human Resources Manager in AE-108, if applicable. Acceptance of Fellowship with Graduate Studies Office, AE-106, if applicable.
- Registration as a graduate student (including CPSC 594, CPSC 598 and CPSC 599). International Students cannot register until after they “check-in” with the International Student and Scholar Services Office, (ISSS).
- Complete “Key Request” form to obtain keys to lab and/or desk area and have advisor contact Business Office for approval and provide information on what keys are needed.
- Selection of Guidance Committee during the first year of study and completion of FORM C, MS Bioinformatics Degree Program.
- Preparation of Study and Literature Review and Research Proposal with signature of Major Adviser for approval to fulfill class requirement in CPSC 594.
- Approved Plan of Study submitted to the Crop Sciences Graduate Office (AE-106 Turner Hall) by Reading Day of the second semester enrolled.
- Completion of Annual Academic Progress Review.
- Approved Research Proposal submitted to the Graduate Office (AE-106 Turner Hall) by Reading Day of the third semester enrolled.
- Completion of at least 32 hours graduate level coursework and 12 thesis research hours.
- Schedule appointment with Graduate Studies Office to review ending degree requirements.
- Begin composition of thesis when research has been completed.
- Adding name to pending degree list in U of I Integrate Applications System.
- Title page check at the thesis office.
- Schedule Final Oral Examination with Faculty Guidance Committee.
- Contact Graduate Studies Office with date of exam, members of your committee, and thesis title for preparation of Thesis/Dissertation Approval form.
- Submit copies of thesis to each member of Guidance Committee for review at least 10 days to two weeks in advance of the Final Oral Exam.
- After passing Oral Exam, finalize thesis if applicable.
- Schedule Departmental Format Review with Graduate Studies Office.
- Electronic submission of thesis to the Graduate College Thesis Office.
- Post deposit considerations from the Thesis Office.
- Completion of Crop Sciences Exit Interview.
- Clean out desk and study area prior to leaving campus.
- Return all office and lab keys to the Business Office in AW-101.
- Graduate.

Ph.D. PROGRAM

Ph.D. candidates are prepared for leadership and independent research in one of the many fields encompassed by the Department of Crop Sciences. The program typically requires approximately three years of study beyond the M.S. degree. Students must pass a preliminary oral examination that tests their knowledge in the major fields of study, usually after substantial completion of coursework requirements. Written preliminary examinations are also required (see below). The following website lists the graduation requirements:

<http://www.grad.illinois.edu/gradhandbook/chapteriv/section02>.

Degree Requirements

For the Ph.D. program, a minimum of 64 hours, (at least a minimum of 12 graded graduate level coursework and 32 hrs. thesis research), are required beyond an M.S. degree. Students can acquire the necessary hours through additional courses beyond 12 hours, seminar, independent study and additional 599. Coursework must include the orientation course, CPSC 594, which is taken during the first or second semester of the graduate program (if it was not taken during the M.S. program). Students will give two research-based presentations with the first being either a poster or a seminar given at an appropriate scientific meeting, ideally within the first two years of their program. In addition, each fall and spring semester, the student is expected to register for the Seminar Series, CPSC 598. During the last or next to last semester, the student is required to “present” their research at the Seminar Series and receive a letter grade, (A-C). The expected time to complete the Ph.D. degree after the M.S degree is 3.5 to 4 calendar years.

Student Guidance Committee

The major adviser and student will identify a minimum of three suitable members of the graduate faculty for the graduate student Guidance Committee. The student will ascertain whether each Committee member is willing to serve if appointed. The student should expect to consult with Committee members during the course of study as needed to plan and carry out a program adequate to meet the student's educational objectives and standards of the University. Whether the Committee meets as a group with the student, or individually, the frequency of such meetings will be determined by the major adviser and/or Guidance committee. **Each student must develop a plan for course work, FORM D (page 57) and submit it for approval by the major adviser by the end of reading day of second semester.** The plan may be modified as required as the student proceeds in graduate study. A copy of the plan and of any changes will be filed in the student's file in the Graduate Studies Office. A plan for thesis research should be developed and submitted to the Guidance Committee as soon as the student understands the field well enough to define a suitable problem, but not later than their second semester of enrollment. Ph.D. students are required to develop a written Research Proposal for their thesis project and have it reviewed by their Guidance committee.

Research Proposal

The research proposal should be drafted prior to the initiation of active research toward the degree and is to be developed by the student in consultation with their major adviser. Students should solicit input from additional faculty members including committee members during the proposal development phase. During the second semester of their program, students should present a draft proposal to the Guidance Committee for review and discussion at one or more meetings held for this purpose. After discussion is complete, the student satisfies the committee by incorporating recommendations and corrections into the proposal, committee signatures are obtained by the student on this Research Proposal, (page 58). The approved research proposal

with the signatures of the Guidance Committee affixed is due to the Graduate Studies Office by reading day in the third semester following enrollment.

The following guidelines provide an example of one format that can be used to prepare a research proposal. Other formats are acceptable. The Research Proposal should include the following content:

Guidelines for Preparation of a Research Proposal

Title - A clear, concise statement of the subject of the research. The title, used by itself, should give a good indication of what the project is about.

Previous Work - A brief review of the current state of knowledge on the problem, how it falls short of meeting current and future needs, and how the proposed work will extend present knowledge (literature citations should be listed at the end of the project outline). The conclusion of this section should lead the reader directly into the next two subsections of justification for further work and the statement of objectives for the proposed work.

Justification - A concise statement of the importance of the problem to the agriculture and rural life of the state, region, or nation, reasons for doing the work at this location at this particular time, and potential benefits to agriculture, the scientific community, and the public at large.

Objectives - A clear, complete, and logically arranged statement of the specific objectives of the project, each identified by number.

Procedures - A statement of the essential working plans and methods to be used in attaining each of the stated objectives. The procedures should correspond to the objectives and follow the same order. Phases of the work to be undertaken immediately and concurrently should be designated. The location of the work and the facilities and equipment available and needed should be indicated. The statement on procedure should indicate that the research has been carefully planned and provide for changes when they are necessary to improve the work.

Duration - An estimate of the time required to complete the research planned and publish the results. Whenever any material change in the objectives of a project is advisable, a new or revised project outline should be prepared. A major change in procedure may also necessitate a revision of a project outline. Projects normally run for one to three years, but a maximum of five years may be requested.

Personnel - A list of the leader or leaders and other technical workers assigned.

Financial Support - An estimate on a separate page of the annual allocations of funds to salaries, wages, equipment, supplies, travel, publication, and any other operating expenses.

References – Citations should be included in a complete and consistent format that is suitable for publication in a scientific journal.

PhD Research Proposal Defense

PhD students are required to craft and defend a proposal that will review the literature and describe the methodology and objectives of their proposed research programs. The student will submit their proposal to their committee members a minimum of two weeks prior to the Research Proposal Defense date. In consultation with their advisor, the student can schedule their research proposal defense prior to their preliminary Examination or no later than three months after the oral component of their preliminary examination. Following completion of the Thesis Proposal defense, the committee members will sign off on the departmental form, "Graduate Research Proposal", indicating that they have reviewed and approved the student's PhD proposal. This form with the committee members' signatures will be submitted to the Crop Sciences Graduate Studies office as well as an electronic copy of their proposal. At the discretion of the faculty advisor, the student can also defend his research proposal on the date of their oral preliminary examination.

Preliminary Exam

Students must visit the Graduate Studies Office at least three to four weeks prior to the exam to complete the form, "Request for Appointment of Doctoral Examination Committee". The student in consultation with his/her adviser and their Guidance committee will determine the scope and specific topics to be covered by the written exam and the specifics for format and timing.

Membership Requirements

The preliminary examination committee must include at least four voting members, at least three of whom must be members of the Graduate Faculty, and at least two of whom must also be tenured at the Urbana-Champaign campus of the University of Illinois.

Departments may request the inclusion of non-Graduate Faculty members who make a significant contribution as voting members of the committee. The Dean of the Graduate College must approve, in advance, individuals who are not members of the Graduate Faculty who will serve as voting members of the committee. To request the approval of a non-Graduate Faculty member to vote, curriculum vitae for the individual and a justification from the chair of the committee must accompany the request for appointment of the doctoral committee, and the individual must have earned a terminal degree in their field of study. The tenure requirement can be met by term members of the Graduate Faculty who retired or resigned with tenure for a period following their resignation or retirement, according to the Policy on Graduate Faculty Membership.

If there are more than four voting members on the committee, at least half of the voting members must be members of the Graduate Faculty.

Upon departmental request, the Dean of the Graduate College may also appoint non-voting members to doctoral committees. Non-voting members do not need to be present at the final examination.

Further information on forming your committee, registration requirements, etc., can be found at: <http://www.grad.illinois.edu/gradhandbook/2/chapter6/committees-exams>. If you are still uncertain about the process, please contact the Graduate College or the Graduate Studies Office in AE-106.

Each PhD student must pass a preliminary examination that tests their knowledge in their major field of study. The Department of Crop Sciences will adhere to all the University requirements/policies on the PhD preliminary examination process (appointment of committee, reporting of outcome, etc.) with the following recommendations specific for PhD students in our department:

- Full-time graduate students who have completed their MS degree must take the Preliminary Exam prior to or during enrollment in their **fifth semester** (not counting summers) or prior to the seventh semester

of enrollment for those students entering directly from an undergraduate degree program directly into the PhD program. These BA direct to PhD students must take qualifying exams prior to their fifth semester (not counting summers) in the program. The Crop Sciences preliminary examination will consist of both a **written and an oral component**. The PhD examination committee will consist of faculty members meeting committee requirements pending approval of the Department Head. The student's major faculty advisor will serve as chair.

- Each of the individual members of the committee will be required to submit to the student four –to-five written essay questions to evaluate the broader knowledge and specific research competence of the student in advance of the oral component of the examination. Each faculty committee member can set the specifics of the student's written examination (closed or open book, use of electronic devices, exam duration, etc.). The faculty members providing these questions will then grade these questions prior to the oral exam. Students will be required to score 80% or greater on these written questions from each of their committee members in order to pass the written exam. If they do not score 80% or better on the written portion of the exam from any of the faculty committee members, they will be tested and re-evaluated for their knowledge in these areas when given the oral portion of the examination. The committee will then decide on whether to pass or fail the student on the basis of their answers to these and additional questions. A copy of the questions and the student's response, as well as a summary of the student's performance on the written questions from each committee member, will be sent to the chair of the examination committee and to the Graduate Coordinator for inclusion in the student's record.
- The oral portion of the exam will be held within a month after completion of the written exams. In the oral exam the committee members will test the student for general knowledge and their response to the questions on the written examinations. Faculty committee members are encouraged to challenge the student with questions outside of their specific research agenda to gauge their competence and skill at communicating their work and general knowledge in a broader and interdisciplinary context.

At the completion of the oral exam, the student will leave the room as the committee decides on whether the student has passed the examination. Decisions of the preliminary examination committee must be unanimous and are recorded on the “**Preliminary Exam Result**”, (PER) form, f.k.a. Certificate of Committee Approval. The committee may make one of three decisions:

- **Pass** the candidate.
- **Fail** the candidate.
- **Defer** the decision. If this option is chosen:
 1. the same committee must re-examine the student,
 2. the second exam *must* occur within 180 calendar days of the date of first exam, and
 3. the outcome of the second exam must be pass or fail.

At the completion of the oral component of the preliminary exam, only the voting members of the dissertation committee sign off on the form, “Preliminary Exam Result”. The form with the committee members' signatures will be submitted to the Crop Sciences Graduate Studies office. The Graduate Studies Office will then immediately report the result of the examination to the Graduate College. If the Graduate

College is not informed of the result of the examination within six months after the scheduled examination date, the committee is considered to be dissolved, and a new committee must be appointed before the examination occurs. The newly appointed committee may, but does not have to, consist of the same members as the dissolved committee.

Final Defense

When the student's dissertation is nearing completion, the student should contact the Graduate Studies Office (sdcarson@illinois.edu) for an appointment to meet with the Graduate Studies Asst. Coordinator. This appointment will be to review the finishing degree requirements, depositing process, and to request the appointment of their Doctoral Final Examination committee. Students are to complete the form, "Request for Appointment of Doctoral Committee", which can be found within this handbook on page 60. The Graduate College rules governing committee composition and the exam process are outlined at <http://www.grad.illinois.edu/gradhandbook/chaptervi/section04>.

Ph.D. students must be **registered** for the **entire** semester in which the Final Defense is given, regardless of when the thesis will be deposited. Be sure to refer to the Graduate College academic calendar for the deadlines. Usually the Final Examination Committee consists of the same members as the student's Guidance Committee. See the **Preliminary Exam** section for specifics related to the composition of Examination Committees. Before the exam, a member of the committee must arrange to pick up the form, Final Examination Result, from the Crop Sciences Graduate Studies Office. For the Ph.D. degree, the final oral examination has the essential character of the preliminary examination, except for the level of performance expected of the student and the finality of its interpretation by the faculty. Traditionally, this examination is described as the "the defense of the dissertation," and generally the research on which the dissertation is based provides the starting point of questions posed. However, it will also challenge the student's general knowledge and ability to integrate their research into the wider framework of their discipline.

The student, chair, and at least one voting member of the committee must be physically present at the exam. The student, committee chair, and at least one additional voting member of the committee must be physically present for all oral components of/the entire examination (i.e., presence by video or teleconference is not acceptable). If the committee has more than one chair, all chairs must be physically present; in these cases, no additional voting member is required to be physically present.

The possible outcomes of the Final Examination are Pass, Pass pending revisions of dissertation, or Fail.

- Pass the candidate with no revisions required. In this case, the committee may sign the Thesis/Dissertation Approval form after the completion of the examination and give it to the student.
- Pass the candidate pending revision of the dissertation; the candidate will receive the signed Thesis/Dissertation Approval form when the prescribed revisions have been completed.
- Fail the candidate. A program may, but is not required to, grant the student another opportunity to take the examination after completing additional research or writing, as recommended by the committee. However, a new committee must be appointed by the Graduate College. The new committee may, but does not have to, consist of the same members as the original committee.

Immediately after the exam is completed, the decision is marked on the Certificate of Result, which is then signed by all members of the Examination Committee and returned to the Crop Sciences Graduate Studies Office. That office will copy the form for the student's file and have the original hand-delivered to the Graduate College.

Preparation of Dissertation

Each student must submit an acceptable dissertation based on independent research on some topic connected with the major field of study and guarantee the publication of the thesis in one of the ways prescribed by the Graduate College. When the dissertation is completed, the student will be required to write up the research in a format acceptable to the Graduate College. If the research findings have been published, please note that the formatting requirements for the Department of Crop Sciences and the Thesis Office are the same. Further information on the thesis formatting can be found at:

<http://www.grad.illinois.edu/graduate-college-thesis-requirements>. Should you still have questions or need further assistance, please contact the Graduate Studies Office.

- An abstract summarizing the entire body of work must be included.
- Appropriate literature review must be included. This should summarize how the research fits into the broader knowledge of the topic area. Part of this information may, but is not required, to be presented in a separate introductory chapter.
- Any data not reported within the body of the thesis must be included in appendices.
- Theses with multiple chapters must provide a summary that integrates the scope of their experiments into a broader research theme.
- If all of the above are included, the remainder of the thesis can be presented in publication format.

All of the following documents will be required when depositing a dissertation.

- At least two signed Thesis/Dissertation Approval forms. Handled by Graduate Studies Office.
- Departmental Format Approval form completed and submitted to the Thesis Office prior to student's electronic submission. This cannot be completed until after the Departmental format review.
- Completion of Crop Sciences Graduate Student Exit Interview.
- A completed Survey of Earned Doctorates.
- ProQuest Microfilm Agreement form, signed (Grad College).
- One abstract, formatted according to ProQuest guidelines.

Well in advance of the Final Defense, a draft of the dissertation is to be submitted to the major adviser. The major adviser will then review the dissertation and make appropriate suggestions. Once these suggestions have been incorporated into the draft, it is to be circulated to the student's Final Examination Committee for review. All members of the Final Examination Committee should receive the dissertation two weeks in advance of the date of the examination. The Examining Committee's recommendations for changes will be presented to the student at the Final Defense.

Submission of Dissertation

Ph.D. candidates must be registered the entire semester they give their Final Defense. If you have not registered for a fall or spring semester prior to your final exam, you will have to fill out a form to be readmitted. International students must be registered until they deposit.

The Graduate College needs a minimum of one to two weeks to process appointing the committee for your Final Defense. There is no longer the form, "Request for Appointment of Doctoral Examination Committee" in which the student can complete. The Final Exam Result form will then be received by the Graduate Studies Asst. Coordinator in time for the exam.

If revisions to the dissertation are required, signatures can be collected at a later date after the examination. Once revisions are completed, the signed Thesis Dissertation Approval form and one hard-copy of the dissertation should be submitted to the Graduate Studies Office in AE-106 for the Departmental Thesis Review, as required by the Graduate College. Dissertations will not be approved when presented solely in publication format. A formatted thesis is required. See guidelines under Preparation of Dissertation.

Acceptance of the dissertation by the Graduate College Thesis Office marks the official end of the graduate program, regardless of when the degree is conferred. The University will officially confer the degree after approval by the Board of Trustees of the University of Illinois. Ph.D. degrees are conferred only in May, August, and December of each year. Diplomas will be mailed to graduates approximately six weeks later to the permanent address on record.

Please refer to the following web site which gives details on the Thesis process <http://www.grad.illinois.edu/thesis/process>. Contact the Graduate Studies Office if there are any questions concerning this process.

Time Limit

A doctoral candidate who does not obtain an M.S. degree must complete all requirements within seven years of his or her first registration in the Graduate College. A candidate for the doctoral degree who has received an M.S. degree must complete the requirements within six years of his or her first registration in the doctoral degree program on this campus.

Within the Department of Crop Sciences, there is an expectation that the Ph.D. degree will be completed in 3.5 to 4 calendar years. Upon entry in the Graduate College, you are assigned an Expected Graduation Date (EGD). Enrollment beyond the EGD is allowed only after petitioning for a time extension. Reasonable extensions are granted by the Graduate College if recommended by the department. A candidate for the doctorate is required to take a second preliminary examination if more than five years elapse between the preliminary examination and the final examination. If coursework is beyond seven years old, the student must petition the Graduate College that it still be counted toward the degree. In this case, the student is required to prove that the material is still current and relevant.

Ph.D. Sequence of Program

- Acceptance and selection of major adviser.
- Completing all necessary steps for stipend payment for research assistantships with Human Resources Manager in AE-108, if applicable. Acceptance of Notice of Fellowship Appt. with Graduate Studies Office, AE-106, if applicable.
- Registration as a graduate student (including CPSC 594, CPSC 598 and CPSC 599). International Students cannot register until after they arrive on campus.
- Complete “Key Request” form to obtain keys to lab and/or desk area and have advisor contact Business Office for approval and provide information on what keys are needed.
- Selection of Guidance Committee during the first year of study.
- Preparation of Study and Literature Review and Research Proposal with signature of Major Adviser for approval to fulfill class requirement in CPSC 594.
- Approved Plan of Study, FORM D, (page 57), submitted to Graduate Studies Office (AE-106 Turner Hall) by reading day of the second semester enrolled.
- Completion of Annual Academic Progress Review.
- Approved Research Proposal submitted to Graduate Studies Office by reading day of the third semester enrolled.
- Schedule appointment with Graduate Studies Office for degree audit, finishing program requirements and formatting requirements for writing of dissertation.
- Completion of a minimum of 12 hours of graded graduate level coursework for PhD program.
- Delivery of a scientific presentation based on dissertation research in CPSC 598 seminar series.
- Submission of Request for Appointment of Doctoral Examination Committee form to the Graduate Studies Office in AE-106 for processing. Submission of form must be done at least three to four weeks in advance.
- Preliminary Examination taken within the fifth (5th) semester of the Ph.D. program; Stage II. Preliminary exam will be comprised of two components; a written component and an oral component.
- Completion of dissertation research and program requirement of registration for a minimum of 32 hours of thesis research hours.
- Registration for entire term during which the Final Defense will take place. In some situations, registration for zero (0) hours of thesis research is appropriate.
- Schedule Final Defense with Guidance Committee. See Graduate College Thesis Office committee requirements at: http://www.grad.illinois.edu/policies/doc_committees
- Submission of Request for Appointment of Doctoral Examination Committee form for Final Defense committee to the Graduate Studies Office in AE-106 for processing. Submission of form must be done at least three to four weeks in advance.
- Add name to the pending degree list in U of I Integrate Student Self Service system.
- Submit copies of thesis to each member of doctoral (guidance) committee for review at least two weeks in advance of the Final Examination.
- Title page formatting and submission of title page only with Thesis Office - <http://www.grad.illinois.edu/thesis/format-title-page>.
- Schedule Departmental Format Review with Graduate Studies Office.
- After approval, Department Head signs off on Thesis Dissertation Approval and the completely signed form is uploaded to Thesis Office portal.

- Preparation of dissertation for electronic submission to the Graduate College Thesis Office.
- Completion of Crop Sciences Graduate Student Exit Interview.
- Resign research assistantship or fellowship if applicable, with Human Resources, AE-108 Turner Hall.
- Clean out desk and study area prior to leaving campus.
- Return of all office and lab keys to Business Office in AW-101 Turner Hall.
- Graduation.

Graduation

Graduation for Ph.D. students can be in May, August, or December. Consult the Graduate College Calendar for dates and deadlines for the specific term during which you plan to graduate. The only graduation ceremony at the University of Illinois is held in May. Students graduating in August or December will be invited to participate in graduation ceremony the following May. A campus-wide ceremony is held at the Assembly Hall. Graduation tickets are distributed by the College of ACES Placement office. If you are on the graduation list, an email will be sent to you directly.

DIRECT B.S. TO Ph.D. DEGREE PROGRAM

Entrance Requirements

The student must have a minimum GPA of 3.5 in the last 60 semester hours (90-quarter hours) of undergraduate course work and in any work done in a degree M.S. program. Graduate Record Examination (GRE) scores are required. Students accepted into this track must be outstanding and have a singleness of purpose. Research experience as an undergraduate is desirable. This program is for exceptional students only, and acceptance into this program requires approval by the Graduate Studies Committee at the time of application. Current M.S. students wishing to pursue this track must meet these same entrance requirements.

Program Requirements

Students in the direct B.S. to Ph.D. program must complete the requirements associated with both the individual M.S. (32 hours) and Ph.D. (64 hours) degree programs (see separate sections on requirements for these programs).

The Qualifying Examination

The Qualifying Examination is a rigorous exam designed to confirm the student's ability to begin a Ph.D. program. This examination is a test of the student's advanced level of knowledge of the proposed subject area.

1. When the BS to Ph.D. student completes 32 hours of course work (or prior to their 5 semester in the program) they will choose 5 courses upon which they wish to be examined. In addition one final question will be to have the students provide a condensed description of their proposed research problem for review.

2. For each course that is suggested by the student, the instructors of those courses are asked to provide three questions which they believe would be suitable to demonstrate sufficient knowledge of the subject for a PhD student.

3. At a pre-arranged date, the Graduate Coordinator will administer the Qualifying Exam to the student(s). The exam will be closed book and the student will answer any two of the three questions submitted by the instructor of each course.

4. The exams are then graded by the faculty member who provided the questions.

5. A grade of 80% for each course is required to pass the written examination.

6. Students that score below 80% on any of the individual course questions will be given the opportunity to retake the examination once. The retake will be an oral exam administered by 2-3 appointed faculty (excluding the student's major advisor).

7. Students that fail will be transferred to the MS thesis program. Upon completion of the MS degree they will be eligible to apply to the Crop Sciences Ph.D. program.

After successful completion of this exam, copies of the written answers will be submitted to the Graduate Studies Office along with the scores provided by each of the faculty course instructors. In the event of failure the student will continue as a M.S. degree candidate.

B.S. to Ph.D. Sequence of Program

- Acceptance and selection of major adviser.
- Registration as a graduate student (including CPSC 594).
- Selection of Guidance Committee during the first year of study.
- Preparation of Study and Literature Review with submission to Adviser for approval to fulfill class requirement in CPSC 594.
- Approved Plan of Study submitted to Graduate Studies Office by reading day of the second semester enrolled.
- Approved Research Proposal submitted to Graduate Studies Office by reading day of the third semester enrolled.
- Take oral qualifying exam before the end of the second year of the program.
- Completion of coursework requirements.
- Meet with Asst. Graduate Studies Coordinator to prepare the form, “Request for Appointment of Doctoral Examination Committee”, at least four weeks in advance of date of Preliminary Exam.
- Preliminary Examination.
- Completion of dissertation research.
- Preparation of dissertation.
- Enrollment in CPSC 599 or another course for term during which the Final Defense will take place.
- Addition of name to the pending degree list through Enterprise system.
- Meet with Asst. Graduate Studies Coordinator to prepare the various forms including, “Request for Appointment of a Doctoral Examination Committee”, for the Final Defense at least four weeks in advance of date of Final Defense (Final Exam).
- Submit signed Thesis/Dissertation Approval form and signed Final Exam Result form to Graduate Studies Office for further processing.
- Submit an electric copy of dissertation to Graduate Studies office for Departmental approval.
- Submit final version of dissertation electronically to Thesis Office
- Submit “accepted” dissertation electronically to the Graduate Studies office.
- Completion of Crop Sciences Graduate Student Interview.
- Return all keys to the Business Office in AW-101 Turner Hall.
- Graduation.

FINANCIAL SUPPORT FOR ON CAMPUS PROGRAMS

Sources and Awarding of Financial Support

To be considered for fellowships and assistantships, prospective students should indicate their desire for financial aid on the admissions application form. Credentials submitted with the form are used in determining who receives the various forms of financial aid. Demonstration of exceptional ability in their studies and/or research activities is an important criterion in selecting students for available fellowships and assistantships.

Fellowships

Fellowships are awarded to graduate students in the Department of Crop Sciences in recognition of superior achievement and potential. Funding comes from a number of sources, each with specific criteria and opportunities.

For example, the Jonathan Baldwin Turner (JBT) Graduate Fellowship is offered to support the academic and professional development of promising young scientists seeking an M.S. or Ph.D. in agriculture. Other fellowships, such as the Pioneer Hi-Bred Fellowship is for students in plant breeding and the William and Nancy Ambrose Fellowship is for students who plan a career in corn breeding, are designated for specific areas of study. Most are awarded after a student has been accepted by the Graduate Studies committee. A comprehensive listing of the fellowships can be found at:
<http://croprosci.illinois.edu/graduate/awards>.

Assistantships

The Department of Crop Sciences offers part-time positions to study with departmental faculty on research, teaching, or extension activities. Research assistantships are offered based on availability of funds and space in an appropriate faculty member's laboratory. Teaching assistantships require meeting University standards of English language skills, excellent teaching potential, and competence in the area being taught.

These assistantships include an annual stipend and can be awarded at different levels of time commitment; however, 50% time appointments are considered standard. In addition to the stipend, assistantships of at least one-quarter time carry a waiver of all tuition and service fees. These waivers are worth thousands of dollars over and above the stipend. Current M.S. and Ph.D. graduate research assistants and fellowship rates are listed below.

CROP SCIENCES		GRAD RATES FY18	
RESEARCH ASSISTANTSHIPS		FELLOWSHIPS	
MS Students			
<u>\$/Mo</u>	<u>\$/12 mo</u>	<u>\$/Mo</u>	<u>\$/12 mo.</u>
50%	50%		
\$1,941.60	\$23,299.20	\$2,066.60	\$24,799.20
RESEARCH ASSISTANTSHIPS		FELLOWSHIPS	
PhD Students			
<u>\$/Mo</u>	<u>\$/12 Mo</u>	<u>\$/Mo</u>	<u>\$/12 Mo</u>
50%	50%		
\$2,102.48	\$25,229.76	\$2,227.48	\$26,729.76

When BA to PhD students passes their Qualifying exams, their pay rate increases. The higher rate will be applied the first August 16 after the student has passed the Qualifying Exam, as the Department cannot give students mid-year raises. Graduate assistants are normally appointed by the semester for a nine-month plus a three month appointment or for a 12-month appointment.

Other Employment/Support

Students holding assistantships for 25-67% time are exempt from tuition and service fees, but are responsible for the remaining fees. Please review the Tuition Waiver Policy at <http://www.grad.illinois.edu/gradhandbook/chaptervii/section04>. The exemption does not apply if the appointment is not held for three-fourths of the semester (91 days). Students who are appointed after one fourth of the semester is passed or who resign their assistantship with more than one fourth remaining are not exempt.

The exemption will apply if the student (a) withdraws from the University on the same date as the resignation or (b) deposits a thesis within one working week following the date of resignation. Other questions about your appointment (tax withholding, benefits, check delivery, W-2 forms, etc.) should be referred to the Human Resources Manager in AE-108.

Scholarships/Awards

Each fall term, current graduate students in the Department have the opportunity to apply for several competitive scholarships that provides cash awards from \$750-\$1000. Applicants are evaluated on the basis of their GPA, resume, publication record, and other scholarly activities.

In the awarding of financial support for graduate study, there are always many more applicants than support funds. Consequently, a careful evaluation of each applicant is made, and offers are extended to those candidates who show the greatest potential for graduate study and for the use of the knowledge gained. The department does not assume the responsibility for supporting students who agree to enter the program at their own expense.

Students who qualify for federal work-study must notify the Crop Sciences Human Resources Manager in order to take advantage of the program. In order to qualify, you must complete the FAFSA form in the winter, and be notified by the Office of Student Financial Aid that you qualify for this funding source.

Work Required & Teaching Assistants

Research and teaching assistants are expected to work part-time for their assistantship. This service can be exclusive of their thesis research. However, it is virtually impossible to determine absolutely the number of hours of work per week expected of most assistants. For instance, one cannot be specific about the time one devotes to a research assistantship that is tied to thesis research. The specific nature of this service is determined by the student's major adviser. Support for students not fulfilling assumed responsibilities may be terminated.

Teaching assistants are selected by the faculty member teaching the course requiring an assistant. Inquiries about position availability should be made to them directly. When seeking assistantships outside of Crop Sciences, students should refer to the Assistantship Clearinghouse that lists hourly positions and assistantships available on campus (<http://grad.illinois.edu/clearinghouse/>).

Students frequently complete their work and leave to take a job before the end of the contract period for their assistantship. In this case, the assistantship must be resigned. Inform your adviser/supervisor as far in advance as possible when you plan to resign and/or complete your study. Letters of resignation should be sent to your adviser and to the Human Resources Manager at least one month in advance. The letter should state that you are resigning and give the exact date. If you have any questions concerning the resignation procedures, contact the Human Resources Manager in AE-108 Turner Hall. If your employment is to be terminated by the University, you should be informed well in advance. Keys must be turned in to the Business Office in AW-101 for return of your deposit and other University property in your possession must be turned over to an appropriate person before you leave. Your desk and office area should be vacated and left in an orderly condition. Leave a forwarding address with the Graduate Studies Office in AE-106.

A student who resigns his or her appointment before serving for at least three-fourths of the term (91 days during the regular semester; 41 days during summer term 2) will be assessed tuition and fees unless the student either withdraws from the University at the same time or before the appointment becomes void, or deposits a thesis within seven calendar days following the resignation date.

Appointment Processing

Because the first day of the pay period is typically August 16, students should plan to begin working on that date. If that day is a weekend, students should discuss the actual start date with their faculty adviser. Additionally, students may not work before their paperwork is completed. For these reasons, new students or students on new appointments who will be working as research or teaching assistant should report to the Crop Sciences Human Resources Manager as soon as they arrive on campus. This is to complete the necessary forms in a timely manner to assure that students' receive their first paycheck without a delay.

Pay periods begin on August 16 for the fall term and on January 1 for the spring term. All assistants should be on campus and have their appointment processing done by these dates. Arriving late or not finishing processing by these dates **will result in late paychecks and/or paychecks for less than a complete month for the first pay period.** All graduate assistants are paid on the 16th day of each month via direct deposit. If the 16th falls on a weekend, pay is deposited on the preceding Friday. Fall appointments are from 8/16 to 12/31. Spring appointments are from 1/1 to 5/15, and summer appointments are from 5/16 to 8/15. As all assistants are paid by direct deposit, the only way to view your earnings statement is by using the NESSIE system, <https://nessie.uihr.uillinois.edu/cf/index>.

Continuing students should check with their adviser to verify that their appointment will be extended into the summer, or the following academic year, depending on individual circumstances. A reminder from the student may be useful, since advisers are required to renew graduate appointments every fall and summer semester. If you have questions about your appointment, see the Human Resources Manager in AE-108.

International students are required to apply for a social security number if they have a research or teaching assistantship. While international students are given a "Temporary Control Number" (TCN) in the beginning, this number is only good for 90 days. International students must have a social security number in order to continue to be paid after the TCN expires. Further information on this process, can be found at: http://www.iss.illinois.edu/download_forms/students/App_SSN.pdf.

Income Taxes

Fellowship stipends may be subject to income taxes. For U.S. citizens, permanent residents and foreign national resident aliens for tax purposes, the Internal Revenue Service (IRS) has ruled that universities are not responsible for withholding or reporting income taxes on fellowship payments. Taxability of the fellowship payment is a matter between the fellow and the IRS. Therefore, no income taxes are withheld from fellowship payments. Fellows do not receive a Form W-2 for their fellowship income nor does the University report the

fellowship payment to either the state or federal government. For more information on the taxation of fellowships, consult [IRS Tax Topic 421 - Scholarship and Fellowship Grants](#).

The Internal Revenue Service (IRS) requires that universities withhold taxes from the fellowship payments to **international students** on temporary visas that are classified as non-resident aliens for tax purposes. International students may be able to claim a treaty benefit that exempts the fellowship payment from income tax withholding. All students on temporary visas must schedule a tax status review appointment with the University Payroll Service Center to determine their tax residency status and whether they qualify for tax treaty benefits. At this appointment, University Payroll determines residency and tax status classification. Fellowship stipend payments will be taxed at the highest possible rate until after the tax status review process is completed. For additional information and links to tax forms, see the [Tax Information](#) Web page. For more information on taxation for international Fellows, consult [IRS Publication 519: Tax Guide for Aliens](#) (PDF).

Sick Leave and Vacations

Research assistants are appointed on a 9-month academic year basis, and do not accumulate annual leave. Most research assistants have a 3-month summer appointment. Research assistants are expected to be on duty on all days except official all-University holidays. Specifically, periods when classes are not in session, such as the period between the end of the first semester and the beginning of the second semester, are not holiday periods for those holding research assistantships.

Graduate assistants are eligible for 13 non-cumulative and non-compensable sick leave days per appointment year, but do not earn vacation time. Any absence at any time should be approved in advance by the student's adviser. Probably more than any other factor, success in science requires hard work and dedication. First-rate scientists routinely work long hours, sometimes seven days a week. In contrast to class work, experiments are expected to continue on weekends and between semesters year round. In fact, the time between classes is often the most productive time to do experiments. Before scheduling a vacation, you should have the approval of your adviser for the time off work.

GRADUATE COLLEGE INFORMATION

Credit Loads

Full-time credit loads are described below. Enrollment for less than full-time during any semester may decrease the fees assessed by the University, but also decreases the services available to you as a student (i.e. McKinley Health Center, IMPE, etc.), and in some cases may cause student loan deferments to be cancelled. Please also note that for purposes of loan deferral only, zero credit registration in GC 599 will count as full time registration. For more information about GC 599, please see the Graduate College web site <http://www.grad.illinois.edu/>. Graduate students not registered for at least a half-time load in a particular term will be subject to Social Security and Medicare deductions for that term.

Graduate students with assistantship appointments of at least 25% (Fellowships impose different requirements, see below)

Fall and spring terms: 8 or more hours

Summer 2 term: 4 or more hours

Graduate students with fellowships (including those holding a concurrent assistantship) and graduate students with "stand-alone" tuition waivers

Fall and spring terms: 8 or more hours

Summer 2 term: 4 or more hours

NOTE: Fellows are required to maintain a full course load each term of registration unless the Graduate College Fellowship Office has approved a reduced course load. Fellows who are international students must also have a reduced course load approved by the International Student and Scholar Services.

Graduate students with 1%-24% assistantships and graduate students without assistantships

Fall and spring terms: 8 or more hours

Summer 2 term: 4 or more hours

NOTES for International Students:

For purposes of course load, each required or recommended ESL course taken as a result of the English as a Second Language Placement Test (EPT) will count as the equivalent of 4 hours, even if the course credit is recorded as zero hours.

Fellows and international students whose first term of study is the summer term must carry a full course of study. In addition, students who hold an RA or TA for the summer term, but were not enrolled full-time for the previous spring or will not be enrolled full-time for the following fall, must also register for the summer term. Registration for all other students for the summer term is at the discretion of the research adviser. Students not enrolling for the summer may have their student health insurance coverage extended through the summer months by visiting the Student Insurance Office in Room 480 in the Illini Union Bookstore Building before the extension deadline in June.

In some cases, the U.S. Bureau of Immigration and Customs Enforcement consider a student full time at a reduced enrollment. International students should check with the Office of International Student and Scholars

Services for details. Continuing international students are not required by the campus to enroll for the summer terms. Those who do enroll are not required to carry a full course load.

International graduate students who have completed all credit requirements (course work and thesis research) for their degree programs may register for zero hours of 599 until completion of study. This registration will be considered full-time for purposes of SEVIS reporting. International students seeking any exception to the full-time credit requirements should contact the Office of International Student and Scholars Services before registering for the reduced credit load.

Grading System

The University of Illinois employs a 4.0 grading scale. Grades range from A+ to F, and each + and – level of each letter grade (with the exception of A+) represents a different value that will be averaged to calculate a student's GPA. A graduate student in Crop Sciences must maintain a grade point average of 3.00 or greater. Under current Graduate College regulations, a student who has an overall graduate GPA below the degree program's minimum at the end of any semester of enrollment will be placed on probation. Once a student has been placed on probation, he or she will have one semester in which to raise his/her overall graduate GPA to his/her program's minimum. Failure to do so will result in dismissal from the Graduate College. The graduate student petition process may be used to appeal this dismissal. Graduate students in Crop Sciences who are on a fellowship, must maintain a GPA of 3.5 or higher.

The University uses the following grading symbols:

AU – Audit. A permanent notation that indicates attendance as a visitor only. Information about auditing a course is located in <http://www.grad.illinois.edu/gradhandbook/2/chapter3/grading-system>.

CR-NC – Credit earned-No Credit: <http://www.grad.illinois.edu/gradhandbook/2/chapter2/registration#topic8>.

DFR – Grade deferred. To be used only in those thesis, research, and special problems courses extending over more than one semester that are taken by graduate students as preparation for the thesis, and in other approved courses that extend over more than one semester. The symbol DFR in courses other than thesis (499/599) must be converted to a permanent grade no later than 5:00 p.m. on Reading Day of the next semester in which the student is registered. If no grade change is submitted within that period, the DFR will be converted as follows: for graded courses to an F, for S/U courses to a U, and for C/NC courses to an NC. The DFR symbol for thesis courses (499/599) stands indefinitely until a Supplemental Grade Report Form is submitted by the adviser at the completion (successful or unsuccessful) of the thesis. See <http://www.grad.illinois.edu/gradhandbook/2/chapter4/graduation> for more information on thesis research credit.

I – Incomplete. Approved extension of time to complete the final examination or other requirements of the course. (Entitles the student to an examination later without fee, or to additional time to complete other requirements of the course. The final grade must be reported on the Supplemental Grade Report Form.) The instructor may authorize such extension of time for a graduate student regardless of the level of the course. A grade of Incomplete must be replaced by a letter grade no later than 5:00 p.m. of Reading Day of the next semester in which the student is registered or it automatically becomes an F grade. If the student does not enroll the following semester in a graded course, the incomplete grade becomes an F-by-rule after one year.

Incomplete grades earned in the spring semester will not be converted to F-by-rule until the end of the following fall semester, whether or not the student registers for the summer term. Requests for extensions of time to complete the course requirements are made by [petition](#) to the Graduate College. A student will not be certified for a degree with an Incomplete grade in the academic record.

NR – Not reported. This temporary notation is automatically entered if an instructor does not report a grade by the deadline.

NV – Not valid. This temporary notation is used when an instructor reports a grade in a mode that has not been approved for use with that course.

S/U – Satisfactory-Unsatisfactory. A permanent notation used as a final grade only in courses (generally thesis research or seminar courses) approved for this grade mode.

W – Withdraw. A permanent notation signifying an approved withdraw without credit, <http://www.grad.illinois.edu/gradhandbook/2/chapter7/registration-refunds>

The “I” grade can be given when a student has not fulfilled all the expectations of a graded course. Upon completion of the required work, the faculty member changes the “I” to the grade the student earned. If no grade change is submitted by Reading Day of the semester following the assignment of the I grade, the grade automatically changes to ‘F by rule’ and is calculated in the GPA as an F grade.

Credit/No Credit Option

Graduate students must present letter grades for the minimum number of hours required for the degree being sought. Graduate students may, with the adviser's approval, take additional hours above the required minimum on a credit/no credit option. No credit is given for courses in which grades of D or F are received. Over the entire course of a degree program, a student must earn at least 8 hours of graded (A-D) course work (excluding thesis and non-credit seminars) for each 4 hours of credit-no credit course work. In any one semester, a student may take no more than 4 hours on a credit-no credit basis. (Hours transferred from another university cannot be used as part of the "graded course work.") If a student is admitted on limited status, or if a student falls below a minimum GPA of 3.0 and is placed on limited status, they will not be allowed to register for credit-no credit course work until the GPA has been raised to the minimum and the limited status designation has been removed.

If a student is admitted on limited status, or if a student falls below the Department minimum GPA of 3.0 and is placed on limited status, he or she will not be allowed to register for credit/no credit course work for hours of credit until the GPA has been raised to the minimum and the limited status designation has been removed. [A student entering with full standing may take a course on credit/no credit basis his/her first semester.]

Policy regarding credit/no credit option can be found in *The Graduate College Handbook of Policy and Requirements for Students, Faculty and Staff* at:
<http://www.grad.illinois.edu/gradhandbook/chapterII/section02>)

The Graduate Student Petition – (Graduate Student Request)

The Graduate Student Petition is used to request an exception to a Graduate College policy or deadline. These petition instructions, including all supporting documentation required for various requests, are available online at the Graduate College web site <http://www.grad.illinois.edu/gsas/gradpetition>. The student completes a request, prints it out, signs it, and asks his/her adviser to endorse the petition (which includes an explanation of his/her support and signature). The form is then returned to the Graduate Studies office AE-106 Turner Hall where it will be submitted to the Director of Graduate Studies, John “Jack” A. Juvik for approval. If approved at the department level, the petition will be forwarded to the Graduate College for review. The student will be notified of the Graduate College decision directly by email. Common examples of uses of the graduate petition are acceptance of non-degree coursework towards a degree, extension of time to complete a degree, to extend time for an I (Incomplete) or DFR grade, etc. Decisions made at the departmental level may require approval of the Crop Science Graduate Studies Committee.

When filing a Graduate Student Petition, it is important for graduate students to consult with the Graduate Studies Office regarding their request for this exception to policy. Depending on the nature of the request, Graduate Student petitions require different information or supporting documentation. Two basic themes should be included on any statement provided in a Graduate Student petition:

1. **Clearly Identify the Issue**
2. **Provide Justification as to why you (the student) should be allowed an exception to this policy or deadline. This justification may include a timeline of events, medical documentation, supporting statements, or other as applicable**

Once you have completed the student section of the Graduate Student Petition, please return the petition to the Graduate Studies office where the petition may be routed for review. Upon completion of the necessary signatures and comments, the petition will then be submitted to the Graduate College for final review and official decision. An email will be sent to both the student and the Graduate Studies Office.

Graduate College Policy

Probation. The Graduate College requires a minimum overall graduate GPA of at least 2.75 on a 4.0 scale; however, graduate degree programs can have a higher minimum if approved by the Graduate College. The minimum GPA for **Crop Sciences is 3.0**. Students who have a lower overall graduate GPA at the end of any semester of enrollment will be placed on probation. Once placed on probation, a student will have one semester to improve their standing to Full Standing, or will be dismissed from the Graduate College.

Appeal of Dismissal. Dismissal from the Graduate College can be appealed by petition. The Graduate College will consider petitions containing strong program support and strong justification based on other factors pertinent to the program's determination of satisfactory academic progress.

Limited Status Admission. A student admitted to the Graduate College on limited status due to low undergraduate GPA must meet the degree program's minimum overall graduate GPA at the end of the first semester of registration or be dismissed from the Graduate College.

GENERAL DEPARTMENT INFORMATION

Area Secretaries

Each student is assigned to their advisor's secretary. Please consult with your advisor as to who this is. Area secretaries do secretarial work for **full-time academic members only**.

Bulletin Boards

The main departmental bulletin board is located on the second floor just opposite W-209 Turner Hall. In addition, several area secretaries maintain bulletin boards for their particular area. There is also a Crop Sciences Graduate Student Organization bulletin board on the second floor across from W-209.

Consolidated Computer Services Group

The Consolidated Computer Services Group (CCSG) provides computer support, network administration, web development, and statistical consulting for faculty, staff and students on university owned computers. This service is supplemental to those provided by CITES <http://www.cites.illinois.edu/>, AITS, the University Library and so on. In addition, the CCSG group is responsible for the computer lab in N-120 Turner Hall. Most work is by appointment and you are encouraged to use email **ds-ccsg@illinois.edu** or a web-based form to request help. The group is located in M-103 Turner Hall.

Keys. Keys for Turner Hall, Edward R. Madigan Lab, Plant Sciences, and National Soybean Research Center are distributed through the Business Office in AW-101. A Key Request form must be completed and signed off on by your advisor. **Return the form to Crop Sciences Business Office (AW-101 Turner Hall): 8:30am-12:00pm & 1:00-4:30 pm.** All keys require a \$5.00 deposit (\$10 max.) which will be refunded when you return the key(s) at the time of graduation or appointment termination.

Mail. Personal mail **should not** be mailed to your office address. The department doesn't mind scientific magazines, e.g., Journal of Biological Chemistry, Plant Physiology, Agronomy Journal, billing statements, etc., but magazines such as Time, Newsweek, Sports Illustrated, etc., should be mailed to your home address. Official mail is distributed through the boxes in your area secretary's office. Outgoing mail (campus or U.S.) may be handled through your area secretary. Please use the correct mailing address for the department on all correspondence. The U.S. Post Office does not deliver mail without a street address. See the table below for the street addresses for Turner Hall, the Edward R. Madigan Laboratory, the National Soybean Research Center, and the Plant Science Laboratory.

ADDRESSES FOR U.S. MAIL (Substitute room number for XXX below.)			
Turner Hall	Edward R. Madigan Laboratory	National Soybean Research Center	Plant Science Laboratory
Department of Crop Sciences University of Illinois XXX Turner Hall, MC-046 1102 S. Goodwin Avenue Urbana, IL 61801	Department of Crop Sciences University of Illinois XXX ERML, MC-051 1201 W. Gregory Avenue Urbana, IL 61801	Department of Crop Sciences University of Illinois XXX NSRC, MC-637 1101 W. Peabody Drive Urbana, IL 61801	Department of Crop Sciences University of Illinois XXX PSL, MC-634 1201 S. Dornier Urbana, IL 61801

Facilities

Turner Hall is open 7:00 a.m. to 5:00 p.m. Monday through Friday unless it is an all campus holiday that falls within the work week. All other doors are locked at 5:00 p.m. The building is closed on Saturday and Sunday. If you enter or leave the building when the doors are locked, be sure the door is locked behind you. It is wise to keep your office or laboratory locked when unattended. In case of a problem requiring building maintenance inform Tracey Malkovich, in AW-101 in person or by calling her at 217.333.0516 or by emailing her at malkovic@illinois.edu. Please note that an account number is required to process requests for services that are departmental responsibility.

	<p>Turner Hall</p> <p>Home of the main department office 1102 S. Goodwin Ave., Urbana, IL 61801 </p>
	<p>Edward R. Madigan Laboratory</p> <p>1201 W. Gregory Ave., Urbana, IL 61801 </p>
	<p>National Soybean Research Center</p> <p>1402 W. Pennsylvania Ave., Urbana, IL 61801</p>



Plant Sciences Laboratory

1201 South Dorner Drive, Urbana, IL 61801|



Plant Care Facility

1102 South Goodwin Avenue, Urbana, IL 61801

<http://pcf.aces.illinois.edu/>



Morrow Plots

The Morrow Plots are the oldest agronomic experiment fields in the United States.

|
<http://agronomyday.cropsci.illinois.edu/2001/morrow-plots/>

Job Placement

Graduate students in Crop Sciences primarily gain employment after graduation through their major adviser or through networking with colleagues during their graduate program. However, the College of ACES also maintains the IConnect ACES system for job seeking assistance for students at a searchable job database online at <http://careerservices.aces.illinois.edu/>. All job announcements that come to the Department are posted on the bulletin board in the hallway across from AE-106 of Turner Hall. Students are strongly encouraged to take advantage of the resources and services provided by a number of career advising offices on campus, particularly the Graduate College Career Services Office (<http://grad.illinois.edu/careerservices/>), which provides extensive opportunities for clarifying your goals and improving your application materials. Other resources on campus include the Illinois Career Services Center, the Biotechnology Center Career Services office, and the ACES Student Development and Career Services Office. If you are looking for work on campus, the Student Office of Financial Aid and the Graduate Student Advisory Council post opportunities on their web pages.

The Roy J. Carver Biotechnology Center (103 Observatory) offers services to assist students with advanced degrees and postdoctoral fellows in their search for employment in biologically-related areas. You may register for the Career Services by calling 333-1378. The Career Services Office has a wealth of resources online at: <http://www.grad.illinois.edu/careerservices>.

Room and Desk Assignments

Incoming graduate students may have to wait for a desk to become available, such as when a graduate student deposits and leaves campus. Please let the Business Office in AW-101 know when you have moved into an available desk.

Safety and Security

Safety is everyone's business. Be careful in all you do. There is a special hazard if you are working alone. In an extreme emergency, help may be summoned by the fire alarm station. Staff and students injured during the course of work duties are requested to report promptly to either the Carle Occupational Medicine Department or the Christie Occupational Medicine Department, or to the respective emergency rooms when the occupational medicine units are closed. Although workers may see their personal physicians, the University will only pay "usual and customary" charges in these situations. Those who go first to the occupational medicine department at Christie or Carle will have all charges paid (including referrals) for compensable on-the-job injuries. Anyone who receives a work deferral for more than three days that is not issued by either of the occupational medicine departments must schedule a follow-up appointment with one of the two departments as soon as practical. It is the sole responsibility of injured workers to keep their departments and the Claims Management Office located at 100 Trade Center, Suite 103, 333-1080, informed of any work deferrals. Hours of operation for the two occupational medicine departments are:

Carle Occupational Medicine http://www.carle-clinic.com/Occupational_Environmental/, Carle Foundation Hospital, 7:00 a.m.-5:00 p.m., weekdays, Telephone: 383-3077

Christie Occupational Health Service <http://www.christieclinic.com/department/occupational-health/>, 101 W. University Ave., Champaign, 8:00 a.m.-5:00 p.m., weekdays, Telephone: 366-1200. *Adapted from Guide to Graduate Life.*

If a fire occurs, call the fire department 911. Fire alarm stations are located in main corridors. Learn their location now. If you call the fire department, wait at the main entrance to direct them to the fire. Everyone should evacuate the building when the fire alarm sounds.

Security in the building is a problem at any time. Do not leave valuables and easily stolen (portable) items (e.g., cameras, laptop computers, purses) where they are accessible and untended. Report "suspicious" strangers lingering in hallways or labs to AW-101.

Sexual Harassment

Sexual harassment is a specific type of insidious and intolerable behavior. This behavior has a specific legal definition, and includes any unwanted sexual gesture, physical contact, or statement which is offensive, humiliating, or an interference with required tasks or career opportunities at this University. Sexual harassment can be overt or covert, physical or nonphysical, spoken or unspoken, and directed at persons of either gender. Whatever the form and wherever the setting, sexual harassment is illegal and will not be condoned by this University. The University has specific regulations and procedures for dealing with sexual harassment. Concerns about sexual harassment should be brought, in confidence, to the department head.

Supplies

Limited office supplies are available to graduate students for use on research projects only. Check with your area secretary to obtain supplies. Notebooks and other materials required in your coursework are personal expenses. Lab supplies may be requisitioned through your adviser's project account; consult your adviser on procedures for this. If you need supplies, equipment, greenhouse, or South Farm facilities for your research project, check with your adviser. All supplies must be charged to a project designated by your major adviser. This includes anything purchased in iBuy or any another supply source.

Field and Greenhouse Space

Arrangements for field space are also made through the major professor, as are any arrangements to use departmental teaching, research, or demonstration areas located off campus. Requests for greenhouse space can be addressed to Ruth Green in the Plant Sciences Lab. Greenhouse space is normally assigned at the beginning of the fall term, and field space in the spring. Students are responsible for their field and greenhouse thesis research, and should do their own harvesting and collection of data. Problems with planting, spraying, and the like can be discussed with the major adviser.

Departmental Clubs and Organizations

The department has several clubs and organizations that are very active and provide additional opportunities for experience and interactions for graduate students. Among these are the Illini Foresters, the American Fisheries Society, the Soil and Water Conservation Society, and the student chapter of the Wildlife Society. Bulletin boards for club activities are located in the west hallway of the first floor of Turner Hall. Graduate students are also encouraged to participate as other opportunities become available through the Department or the Graduate College.

Graduate Student Organization – contact Michelle Pawlowski, President

Other clubs within the Department

CPSC Ambassadors

Contact: Bruce Bartlett

Crop Sciences Ambassadors are undergraduate students majoring in Crop Sciences who participate in a range of activities to promote the department. The students come from diverse backgrounds and are enrolled in different undergraduate concentrations in the department. The Ambassadors are knowledgeable about Crop Sciences programs and about life as an undergraduate student at U of I.

Field and Furrow

Contact:

To advance and disseminate knowledge concerning soil and crops; to foster a spirit of cooperation and mutual helpfulness among students in Agronomy; to provide an opportunity for a wider acquaintance with the staff members in Agronomy; to cooperate with other chapters for the furtherance of the Science of Agronomy; to correlate activities in Agronomy with other closely related fields.

Departmental Events

The Department annually sponsors several events throughout the year. Watch for announcements about these events via email and/or posters. **In addition, the departmental seminars are held each Wednesdays and Thursdays at noon. Seminars are only given during the fall/spring terms.**

Policy on Attendance at Scientific Meetings

Attendance at scientific meetings is desirable for individuals and for the Department. Graduate advisers having grant, trust, or contract funds available may use them for reimbursement of graduate student travel at the faculty member's discretion consistent with the purposes for which the funds were allocated or awarded. Level of funding for students is subject to the same restrictions as for faculty traveling to scientific meetings. Limited funds for graduate student travel are available from a gift to the Department. These are awarded annually on a competitive basis. In addition, limited funds for graduate student travel are available from the Graduate College and deadlines will be announced in the department newsletter.

POLICY AND PROCEDURES ON GRIEVANCES

A policy on grievance procedures for graduate students has been adopted and is listed below. We hope that no situations arise in which a student has a grievance. However, if a need should arise, the procedure stated in the policy statement will apply.

Introduction

All members of the University community are expected to observe high standards of professional conduct and ethical behavior in graduate education and in the supervision of graduate research and teaching (Guiding Standards for Faculty Supervision of Graduate Students, March 31, 1997). In a large and heterogeneous scholarly community however, problems may arise. Thus the University articulates its policies and provides effective informal and formal procedures for resolving these problems involving graduate students.

The purpose of this policy is to protect the interests of graduate students in the Department of Crop Sciences by providing informal and formal means of seeking resolution in case of an inappropriate action of a member of the faculty or administrative staff or an inappropriate application of a department policy. Any graduate student in the Department of Crop Sciences may informally pursue or formally file a grievance when s/he believes that a decision or behavior adversely affects his/her status as a graduate student.

This Policy and Procedures on Grievances by Graduate Students in the Department of Crop Sciences specifies the policy and describes the procedures to be employed to resolve grievances by graduate students in this department. It was approved by the Graduate College on May 30, 2000. This policy does not apply in cases of academic misconduct. Breaches of academic integrity in research and publication are handled under the campus's Policy and Procedures on Academic Integrity in Research and Publication. Similarly, this policy does not apply to cases that arise under the Code of Policies and Regulations Applying to All Students ("Code"), such as capricious grading in a course (Section 26) or academic integrity (Section 33). The policies and procedures described in this document do not override or supersede any other policies as established in the University *Statutes* and campus policies.

Scope and Coverage

A. Definition of a Grievance

A grievance may arise when a graduate student believes that his/her status as a graduate student, or University appointment based on student status, has been adversely affected by an incorrect or inappropriate decision or behavior. Examples include, but are not limited to the following:

1. inappropriate application of a department or University policy;
2. being unfairly assessed on a preliminary examination;
3. being required to engage in excessive effort on assistantships;
4. being improperly terminated from student-based University appointment (teaching or research assistantships, etc.);
5. being improperly terminated from a program;
6. being required to perform personal services unrelated to academic or assistantship duties;

7. being required to meet unreasonable requirements for a graduate degree that extend the normal requirements established by the campus or by the department and are inconsistent with the scholarly standards in the discipline;
8. being the subject of retaliation for exercising his/her rights under this policy; or
9. being the subject of professional misconduct by a student's graduate supervisor or other faculty or staff member.

Practices or actions by a student's supervisor, other faculty member, or other member of the University community that seriously deviate from ethical or responsible professional standards in the supervision of graduate student work may constitute professional misconduct in violation of University policy.

Informal Procedures

University policy strongly encourages all students who believe they have a grievance to use all appropriate avenues for informal resolution before initiating a formal grievance. Students in Crop Sciences are encouraged to discuss the issue with the faculty or staff member with whom the problem has arisen. If a satisfactory solution is not forthcoming, the student should discuss the issue with his or her adviser, the director of graduate studies, or the Head of the department, who shall attempt to find a resolution acceptable to both parties. The student may also consult with the Graduate College, the Office of the Dean of Students, the Ombudsman Office, the Office of International Student Affairs, or other sources.

Formal Procedures

A. Identification of the Grievance Committee

The Graduate Student Policy and Grievance committee shall serve as the department Grievance Committee. This committee consists of two graduate students and nine faculty members. The committee and its chair are appointed by the Head. The chairperson of this Committee is listed in the department's *Handbook of Policies and Procedures*, available in AW-101 Turner Hall or from the student's adviser. When serving as a grievance committee, the chair is responsible for assuring that a record of the committee's investigations, deliberations, and recommendations is forwarded to the Head.

B. Procedures

1. A student in the department of Crop Sciences may file a formal grievance with either the department head or directly with the Graduate College, as the student elects. A formal grievance should be filed promptly and must be filed in writing within 180 calendar days of the decision or behavior resulting in the grievance, regardless of whether the department procedure or Graduate College procedure is used. The written grievance should indicate the parties involved, the action or decision being contested, any applicable university, campus or unit policy, an explanation of why the action or decision is inappropriate, and the remedy sought.

2. The Head shall define the subject matter and scope of the issues related to the grievance in a written charge to the grievance committee. The primary involved parties shall receive a copy of the charge.

3. Any participant to the grievance may challenge any member of the grievance committee if there is a perceived conflict of interest. The challenge should be made in writing to the Head of the department. If the objection is prompt and reasonable, the Head shall replace the person with one who meets the stated criteria. The decision of the Head as to whether the challenge is prompt and reasonable as to the acceptability of the replacement selected may be a basis for appeal of the grievance committee's recommendation.

4. The grievance committee's investigation shall include a review of written materials presented and seeking information from the primary parties in writing or in person.

5. Within 30 calendar days of the filing of the grievance, the chair of the grievance committee shall report its recommendations in writing to the department Head. The Head may grant an extension of the time limit for good cause. The committee's report shall contain:

- a. a summary of the grievant's contentions and relief sought
- b. the response of the individual against whom or department against which the grievance was filed
- c. a general description of the investigative process
- d. a citation of relevant policies
- e. an explicit finding of fact based on the preponderance of the evidence with respect to each grievance included in the investigation panel's charge
- f. a listing of the evidence relevant to each finding
- g. an indication of whether there was a reasonable basis in fact and honest belief for the allegations in the investigated grievance
- h. a recommendation of appropriate redress for the grievant(s) and
- i. any recommended changes in policies and procedures to minimize the probability of recurrence.

6. Within 7 calendar days of receipt of the committee's report, the Head shall determine the disposition of the case and communicate the decision to the primary involved individuals. If the Head determines that the grievance has not been proved or has no merit, the Head will notify all involved parties and all persons who have been interviewed or otherwise informed that the grievance has been dismissed.

If the Head concurs with the committee's conclusion that the grievance has been sustained and has merit, the Head will proceed in accordance with the University statutes and relevant University rules and regulations. The Head may, after consultation with appropriate campus officers, prescribe redress for the grievant. In addition, the Head may initiate modifications of department policies or procedures. The Head shall notify the relevant primary involved individuals (grievant, respondent, grievance committee members) of actions taken.

7. Within 10 calendar days of receipt of written notification of the Head's determination, appeals may be made to the Graduate College as specified in the Graduate College grievance policy. This appeal can be based only upon demonstrated specific deficiencies in the application of this department grievance procedure to the student's grievance.

8. After completion of a grievance review and all ensuing related actions, the Head shall return all original documents and materials to the persons who furnished them. The department shall destroy the grievance file on a date 5 years beyond the grievant's time limit for completion of the degree. A report of the nature of the grievance and the primary involved parties shall be forwarded to the Graduate College.

Suggestions for Graduate Students

The graduate program of study is designed to provide students the opportunity to achieve a high degree of competence in preparation for a professional career. Throughout the program, the student is being evaluated, both formally and informally. Grades attained in formal courses are important but so is course selection. Typically, the most in-depth evaluation of the student's professional competence is provided by the preliminary and final exams and the thesis presentation. That competence will be reflected not only by a positive outcome to both exams, but also in the letters of reference written by the major adviser and committee members. The following are but a few general suggestions that will, hopefully, prove useful.

Preparation for Oral Exams

Well in advance of the examination; make plans to visit with each member of the Examination Committee. Ask for suggestions as to what you should prepare for. You may not have had a course from this person, and you may be examined on something different than you might expect. Prior to the examination, it is also prudent to discuss the procedure and guidelines thoroughly with your major adviser, so that you understand specifically how the examination will be conducted. Typically, advisers have helpful suggestions.

Remember, there are several ways to respond to a question.

1. Give the correct answer.
2. Ask for clarification of the question. It may not have been worded so that you would give the best answer. In addition, this will give you time to think.
3. "I don't know" is a far better option than inventing an answer that may then be refuted by the committee. The examiner may not let an "I don't know" answer stand, trying instead to lead you to the correct answer with other questions.
4. The question may call for a speculative answer. If so, speculate. You may need more information before you answer; if so, ask for it.
5. **Remember, "The Committee wants to help you."** Committee members are expected to maintain professional attitudes and conduct the examination without personal bias.

Do whatever possible to reduce your nervousness. Being nervous will interfere with your conduct and responses to questions. If, during the examination, you find yourself in need of a brief pause or refreshment, ask your major adviser if this is permissible.

For the final examination on the thesis or dissertation, you should be prepared to review:

1. Reasons for the study - scientific or practical implications.
2. Methods used for the important findings and their significance.
3. Unanswered problems suggested by your research or in other words, "What's next?"

Publication of Thesis and Dissertation Research

Research is complete only after the results have been published and transmitted to those who may have interest in, or use for, the results. All graduate students are expected to prepare, in counsel with their major adviser, one or more manuscripts suitable for appropriate publication. The major adviser will provide guidance regarding the type of publication and the publication outlet.

GENERAL PROVISIONS

Coverage

This policy and these procedures apply to all graduate students and members of the academic and administrative staff in the Department of Crop Sciences. This policy also applies to former graduate students, provided they meet the timeliness requirements specified in the procedures above.

Oversight Authority and Responsibility

1. The Head has responsibility, under the policies and procedures of the Graduate College, for the management of the Department of Crop Sciences graduate programs and related policies and procedures.

2. The Head shall have the primary responsibility for administering campus procedures detailed herein. All information and items furnished will be made available to the grievance committee. During the course of an investigation, the Head will provide information about the status of the proceedings to the primary involved individuals. Subsequent to the grievance committee's reporting, the Head will maintain a file of all documents and evidence, and is responsible for the confidentiality and the security of the file. The Head shall make the complete file available to the associate dean of the Graduate College on the appeal of a grievance outcome to the Graduate College.

Confidentiality

All persons involved in administering these procedures will make diligent efforts to protect the reputations, privacy, and positions of all involved persons. These persons include those who file grievances, persons who are alleged in a grievance to have taken inappropriate actions or activities, and department administrators. All of the procedures and the identity of those involved should be kept confidential to the extent permitted by law. However, confidentiality regarding information other than the identity of the grievant need not be maintained if the grievance is found to be false and in particular if dissemination is necessary to protect the reputation of individuals or units falsely accused. Making public the fact that a grievance has been deemed false or unproved is not considered retaliation against the grievant. Protection of confidentiality does not preclude disclosures necessary to redress actions leading to a grievance.

Standards of Evidence

In reviewing grievances and in following the procedures mandated herein, a decision or behavior challenged in a grievance, especially a professional judgment of student performance, is presumed to be acceptable until proven otherwise by a preponderance of the evidence.

Academic Freedoms and Rights of the Parties

1. It shall be a prime concern of all persons who implement this policy and these procedures to protect the academic freedoms fundamental to the academic enterprise. Among other things, this includes the professional judgments of student performance that are an essential part of the graduate education process. Academic freedom, however, affords no license for the mistreatment of graduate students.

2. The rights of the primary involved individuals shall be specified in the form of a written notice or letter from the Head. The primary involved individuals have the following rights:

- a) To receive notice of the identity of the members of the grievance committee.
- b) To receive a written statement of the charge including the subject matter being considered by the grievance committee. If additional information emerges during the committee's evaluation that substantially changes the subject matter, the parties shall be informed promptly in writing.
- c) To submit statements in writing and to meet with the committee to present information.
- d) To consult private legal counsel, or another person who may provide advice at the meeting with the committee. Prior notice of the presence of an adviser must be given and any other primary involved party may request a delay of up to 5 calendar days to arrange for the presence of an adviser.
- e) To review and respond to the grievance committee's final report.

3. Any of the parties responsible for the implementation of this policy may consult University Legal Counsel at any time during the informal or formal processing of a grievance.

Conflict of Interest

A conflict of interest is a significant professional or personal involvement with the facts or the parties to a dispute. Any participant who has a conflict of interest in a dispute under this procedure, or a concern about a conflict on the part of another, shall report it to the Head who shall take appropriate action. If the Head has such a conflict, the Head will inform the Associate Dean of the Graduate College who will, in consultation with the dean of the academic college, decide how to address the situation.

Timeliness and Procedural Changes

All procedures prescribed in this document should be conducted expeditiously. The Head for good cause may extend any of the time periods and may make other reasonable alterations of these procedures, provided that the alteration does not impair the ability of a grievant to pursue a grievance or the respondent(s) named in the grievance to defend him/herself. Any alterations of these procedures must be communicated to all pertinent parties.

Withdrawal of a Grievance

The grievant may submit a written request to withdraw the grievance at any time. The Head shall decide whether to approve the request. A request to withdraw shall be approved only if both parties to the action agree to terminate the proceedings. If the withdrawal request is approved, the Head shall notify the primary involved parties and the files shall be destroyed. If the withdrawal request is denied, the grievance shall continue to be processed to a conclusion according to the above procedures.

Termination of University Employment

The termination of University employment of any of the primary involved individuals in a grievance, by resignation or otherwise, after initiation of procedures under this policy, shall not necessarily terminate these proceedings.

Malicious Charges

Bringing unfounded charges in bad faith is a violation of this and the Graduate College grievance policy. If the grievance committee determines that the allegation(s) in the grievance or the testimony of any person was unfounded and motivated by bad faith, that finding shall be communicated by the Head to the Dean of the Graduate College and the dean of the academic college. After consultation with the Provost, the deans may inform the Head of such a finding. Such finding may be the basis for disciplinary action or other personnel decision in accordance with University rules and regulations.

FORM A - M.S. GRADUATE STUDENT PLAN FOR COURSEWORK - THESIS OPTION

Name of Student _____ UIN _____

Major Advisor _____ Expected Graduation Date _____

Area of Research _____

Committee Members: (Minimum of 3* graduate faculty members required)

1) _____ (*Advisor*) 3) _____

2) _____ 4) _____

THESIS OPTION:

32 hours total (20 hours of graded coursework + 12 hours thesis research)

20 hours of graded coursework include: four (4) hours at 500 level + one (1) hour (letter grade A–C) seminar series presentation

Course Number – 400 Level	Hours	Course Number – 500 Level	Hours
_____	_____	CPSC 594 Prof. Orientation	_____
_____	_____	CPSC 598 Seminar Series Presentation	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Crop Sciences 599 thesis research hours (no more than 12 can be used) _____

Total Hours Completed _____

Student's Signature Date

Major Advisor's Signature Date

FORM B - M.S. GRADUATE STUDENT - NON-THESIS OPTION

PLAN FOR COURSEWORK

Name of Student _____ UIN _____

Major Advisor _____ Expected Graduation Date _____

Area of Specialization _____

Committee Members: (Minimum of 3* graduate faculty members required)

1) _____ (Advisor) 3) _____

2) _____ 4) _____

NON-THESIS OPTION – DEGREE REQUIREMENTS:

32 hours of graded coursework comprised of: twelve (12) hours at 500 level, one (1) hour (letter grade A–C) seminar series presentation and one (1) hour for professional orientation course.

Course Number – 500 Level	Hours	Course Number – 500 Level	Hours
CPSC 598 - Presentation	_____	CPSC 594 – Prof. Orientation	_____
_____	_____	_____	_____
_____	_____	_____	_____

Course Number - 400/500 Level	Hours	Course Number – 400/500 Level	Hours
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Total Hours Completed _____

Student's Signature

Date

Major Advisor

Date

FORM C. BIOINFORMATICS M.S. DEGREE

PLAN FOR COURSEWORK*

* This plan to be submitted by the advisor during the first year of graduate study and modified as required.

Name of Student _____ UIN _____

Major Advisor _____

Term of Admission _____ Expected Date of Degree _____

Area of Research _____

Committee Members: (Minimum of 3 members of graduate faculty)

_____ (advisor) _____

COURSE PLAN:

M.S.--must total 32 hours (28 graded hours for thesis and 4 hours of thesis research)

M.S.--must total 36 hours of graded coursework for non-thesis option

1. Graded Coursework at 500 Level (12 hrs.) See reverse side for listing of courses

Course Number	Course Number	Hours
Fundamental Bioinformatics _____	_____	<u> 4 </u>
Crop Sciences _____	_____	<u> 4 </u>
Computer Sciences _____	_____	<u> 4 </u>

B. Other Graded Coursework (7 hrs.)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

C. Crop Sciences 598 and/or _____ 1

D. Crop Sciences 599 (thesis hours) if applicable _____

Total Hours _____

 Student's Signature _____ Date _____

APPROVED:

 Major Advisor _____ Date _____

 Department Representative _____ Date _____

FORM D - PH.D. GRADUATE STUDENT PLAN FOR COURSEWORK

Student's Name _____ UIN _____

Major Advisor _____ Expected Graduation Date _____

Area of Research _____

Guidance Committee Members: (Minimum of 4 members* of the graduate faculty are required)

- 1) _____ (*Advisor*) 2) _____ *
- 3) _____ * 4) _____ *
- 5) _____ 6) _____

PROGRAM EXPECTATIONS:

Doctorate candidates are expected to take the Preliminary Exam by or during their fifth semester and their Final Exam by their seventh semester. (This does not include the summer semesters.)

_____ **Expected Date of Preliminary Exam** _____ **Expected Date of Final Exam**

COURSE PLAN:

Ph.D.--must total 64 hours (a minimum of 12 graded coursework hours + 32 thesis research hours {CPSC 599} + 20 hours (other – seminar series/coursework/thesis research hours)
Mandatory Courses: CPSC 594 and CPSC 598

Course Number	Hours	Course Number	Hours
CPSC 594 Professional Orientation	_____	CPSC 598 Seminar Presentation	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Crop Sciences Thesis Research Hours _____

Total Hours _____

_____ Student's Signature _____ Date

_____ Major Advisor _____ Date

DEPARTMENT OF CROP SCIENCES

GRADUATE RESEARCH PROPOSAL

Name: _____ Date: _____

Attached is the M.S. Ph.D. research or special project proposal entitled:

This proposal has been reviewed by the Guidance Committee of the student, and will serve to guide the research program of the student.

Approved by:

Adviser

Co-Advisor

Committee Member

Committee Member

Committee Member

Committee Member

Received by _____ on: _____
Graduate Coordinator Date

Advanced Studies in Crop Sciences- CPSC 593 Contract

Student's Name: _____ Date: _____

Student's UIN: _____

Curriculum: _____ M.S. _____ Ph.D. _____

GPA: _____ Hours Earned: _____

Semester Enrolled in CPSC 593: _____ Credit Hours: _____

Research Supervisor's Name: _____

Research Supervisor's CRN: _____

Expected Credit: _____

List all special problems, research or thesis courses previously taken:

Dept. and Course No.	Semester Taken	Title of Problem	Instructor	Hours	Grade
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Please attach a one page description of the research project or special topic including:

- 1) Proposed project summary
- 2) Overview of research topic or special topic
- 3) Summary of research materials and methods or topics to be covered
- 4) Expected final product

Student's Signature: _____ **Date:** _____

Approved by (Instructor's Signature): _____ **Date:** _____

Approved by (Faculty Advisor's Signature): _____ **Date:** _____

Approved by (Authorized Dept. Signature): _____ **Date:** _____

Student Responsibility

Students must initiate the advanced study experience by discussing their interests and/or potential research opportunities or advanced study topics with individual faculty. They are responsible for making sure they meet the eligibility parameters for the course description they are interested in. Students are responsible for keeping communication lines open and making timely progress on the proposal application and the actual experience. The student should submit periodic progress reports to the faculty supervisor. The student should submit a final report summarizing the research project or special topic prior to a grade being assigned.

Faculty Member Responsibility

Guidance given to students should include help in defining a reasonable experience that is commensurate with credit expected. Both the expected experience and associated credit should be made clear to the student prior to enrolling in the class. The faculty member is the mentor for the research experience or special topic.

PLEASE RETURN THE COMPLETED FORM TO: AE-120 TURNER HALL

REQUEST FOR APPOINTMENT OF DOCTORAL EXAMINATION COMMITTEE

PRELIMINARY EXAMINATION

FINAL DEFENSE

EXAM DATE: _____ **EXAM LOCATION:** _____

STUDENT INFORMATION

Student's UIN: _____ **Email address:** _____

First Name: _____ **Middle Initial:** _____ **Last Name:** _____

COMMITTEE MEMBERS - Please note that at least 4 voting members are required, 3 of whom must be UIUC graduate faculty and 2 of whom must be tenured UIUC graduate faculty.

Chair of committee: _____

Co-chair: _____

Director of Research: _____

Co-director: _____

Member: _____ **email address:** _____

Member: _____ **email address:** _____

Member: _____ **email address:** _____

Member: _____ **email address:** _____

Are There Voting Members Who Are Not UIUC Graduate Faculty: Yes

A justification and CV are required for each voting member who is **not** a member of the UIUC Graduate Faculty.

Department Where Outside Member is From: _____

Nonvoting Member: _____

Please send email to Grad Studies Office with information as to why this individual is on your committee.

**THIS FORM MUST BE SUBMITTED TO
THE GRADUATE STUDIES OFFICE IN AE-106 TURNER HALL
FOR PROCESSING THROUGH GRADUATE COLLEGE THESIS OFFICE**