

Academic
Year

2021-22

Graduate Student Handbook

Department of Plant Sciences

Herbert College of Agriculture

The University of Tennessee - Knoxville

August 2021

ABOUT THIS HANDBOOK

This handbook describes our department, how it can help you succeed, and its expectations of you as a graduate student. We have included links to The University of Tennessee Graduate School's handbook, as well as information about various university services, publications, fees, helpful offices, & phone numbers that recent graduates have indicated were helpful. Please feel free to consult any of us if you have questions or suggestions.

Plant Sciences Graduate Committee:

Bill Klingeman, PS Graduate Director

Jim Brosnan

David Butler

Renata Oakes

Larry Steckel

Neal Stewart

***Please note:** Adoption and accuracy of these drafted Departmental policies, procedures and curriculum, as outlined in this handbook, are subject to pending and final approvals by Herbert College of Agriculture, UT Graduate School, and UT Faculty Senate committees. As such, terms of this handbook are subject to change. Contact the PS Graduate Director if you have questions.*

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I. Introduction

A. Welcome to the Department of Plant Sciences

We are very happy that you have chosen to pursue an advanced degree with us, and we look forward to working with you over the next few years. I am confident that most of you will be able to look back on this experience as one of the more enjoyable and exciting times of your life. You are making the transition from student to professional, and you will be conducting independent research; research of which you will be proud. Do your best in your coursework and your research project, but don't miss out on enjoying the friendship of your fellow graduate students, in this department as well as others. It is true in my case, and I am quite sure that the faculty in our department will agree...some of the best friends you will cultivate in life are fellow graduate students.

This handbook is intended to serve as a resource for information regarding policies and procedures in the Plant Sciences graduate program. We would encourage you to read it thoroughly at your first opportunity. It is not intended to be a complete, all-inclusive guide. New questions and issues arise on an almost daily basis. But we have attempted to put in this book some of the more pertinent policies and procedures regarding your graduate program experience and believe that it will be a useful resource. Please do not hesitate to contact your advisor, a faculty member (particularly those who are members of your committee), our Graduate Director Dr. Bill Klingeman, or me if you have any questions, need guidance, or have suggestions. We welcome input on ways to strengthen this experience for future students. I have an open-door policy. My office is in Room 362 Brehm Animal Sciences Building.

Again, welcome to the department! We are glad you are here. Make the most of your experience, and do not hesitate to call on our faculty, staff, or me for assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Bates". The signature is fluid and cursive, with a large initial "G" and "B".

Dr. Gary Bates, Department Head

Please be aware: You, not your major professor or departmental staff, are responsible for the success of your graduate program. It is your responsibility to be aware of University and Department of Plant Sciences rules and regulations. You must follow these rules and stay on top of University, Graduate School, and Plant Sciences Departmental deadlines to graduate.

B. Graduate Degrees Offered in Plant Science Within the Herbert College of Agriculture

<u>MAJORS</u>	<u>DEGREES</u>
Plant Sciences	MS thesis; MS Project
Plant, Soil, and Environmental Sciences	PhD

MINORS (for graduate students pursuing either MS or PhD Degrees)

Plant Sciences
Statistics (via IGSP for Plant Sciences)

Concentrations in crop sciences, horticulture, plant breeding, plant molecular genetics, and weed science are available to MS and PSES PhD students.

For information about the College of Architecture and Design and Herbert College of Agriculture joint Master of Landscape Architecture (MLA, MALA and MSLA) degrees, visit the Graduate Catalog: <http://tiny.utk.edu/grad-catalog>

C. Equal Employment Opportunity (EEO) and Affirmative Action (AA) Statement/Non-discrimination Statement

The University of Tennessee does not discriminate on the basis of race, sex, color, religion, national origin, age, disability or veteran status in provision of educational programs and services or employment opportunities and benefits. This policy extends to both employment by and admission to the University.

The University does not discriminate on the basis of race, sex or disability in its education programs and activities pursuant to the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990.

Inquiries and charges of violation concerning Title VI, Title IX, Section 504, ADA or the Age Discrimination in Employment Act (ADEA) or any of the other above referenced policies should be directed to the Office of Equity and Diversity (OED), 2110 Terrace Avenue, Knoxville, TN 37996-3560, telephone 865-974-2498 (V/TTY available) or 974.2440. Requests for accommodation of a disability should be directed to the ADA Coordinator at the UT Office of Human Resources, 600 Henley Street, Knoxville, TN 37996-4125.

D. Plant Sciences Graduate Student Association

On behalf of the Plant Sciences Graduate Student Association (PSGSA), welcome to Rocky Top! The mission of the association is to create an inclusive community among graduate students while enhancing their knowledge of plant sciences through social, professional, service, and education-based activities. The PSGSA aims to serve

prospective, current, and former students in the Department of Plant Sciences. Our members are here to answer any questions you may have and to serve as a resource in your transition to graduate school. Shoot us an email at: PSGSA@utk.edu. We look forward to seeing you on campus!

The PSGSA holds monthly social events on the second Thursday of each month. We also plan semesterly community service events and host a new student welcome event each August. All graduate students in the Department of Plant Sciences are members of the PSGSA. Elections for officer positions are held in early April of each year. For more information on how to participate or if you have any questions please contact us.

Follow us on social media!  @plantsciencegsa  @UTPSGSA

Please let us know about your research, published papers, awards, etc. so we can share with our followers!

E. General Duties, Responsibilities, and Appropriate Behavior of Faculty and Graduate Students

The Student Handbook of the University of Tennessee is named *Hilltopics*. Two important sections of *Hilltopics* are the **Principles of Civility and Community** (<https://hilltopics.utk.edu/principles-of-civility-community/>). These principles should guide the behavior of every person associated with the university. *Hilltopics* also contains the **Student Code of Conduct** (<https://hilltopics.utk.edu/student-code-of-conduct/>).

In 2011, the university adopted the **Principles of Civility and Community**, which are designed to work in concert with all existing codes of conduct. The principles encourage all members of the campus community to foster a learning environment where the differences of our diverse culture are valued, respected and celebrated. Civility is an act of showing regard and respect for others including politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness. Ultimately, civility is treating others as we would like to be treated. Our community consists of students, faculty, staff, alumni, parents of students, and campus visitors. Community members affect the well-being of others and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected. By affirming the value of each member of the university community, the campus asks that all its members adhere by the following principles.

INCLUSIVITY - We are welcoming to all and hostile to none. We foster an open community in which educational goals may be pursued.

DIVERSITY - We respect the diverse backgrounds of all members of our community and welcome the opportunity for interpersonal and group interactions.

DIALOGUE - We value, encourage, and facilitate free exchange of diverse ideas and points-of-view along with free speech and expression. However, we discourage uncivil speech or expression that infringes upon the ability of others to express themselves.

COLLEGIALITY - We value an environment that facilitates collegial relationships, encourages mutual understanding among diverse individuals, and leads to addressing issues and differences in an atmosphere of mutual respect and civility.

RESPECT - We believe that a person's views, ideas, and behavior best reflect the goals of the academic community when the dignity of each individual is respected and when members of the community are considerate of the feelings, circumstances, and individuality of others.

KNOWLEDGE - We encourage development of a civil community that values critical inquiry, debate, discovery, and innovation to better the world through teaching, research, and service.

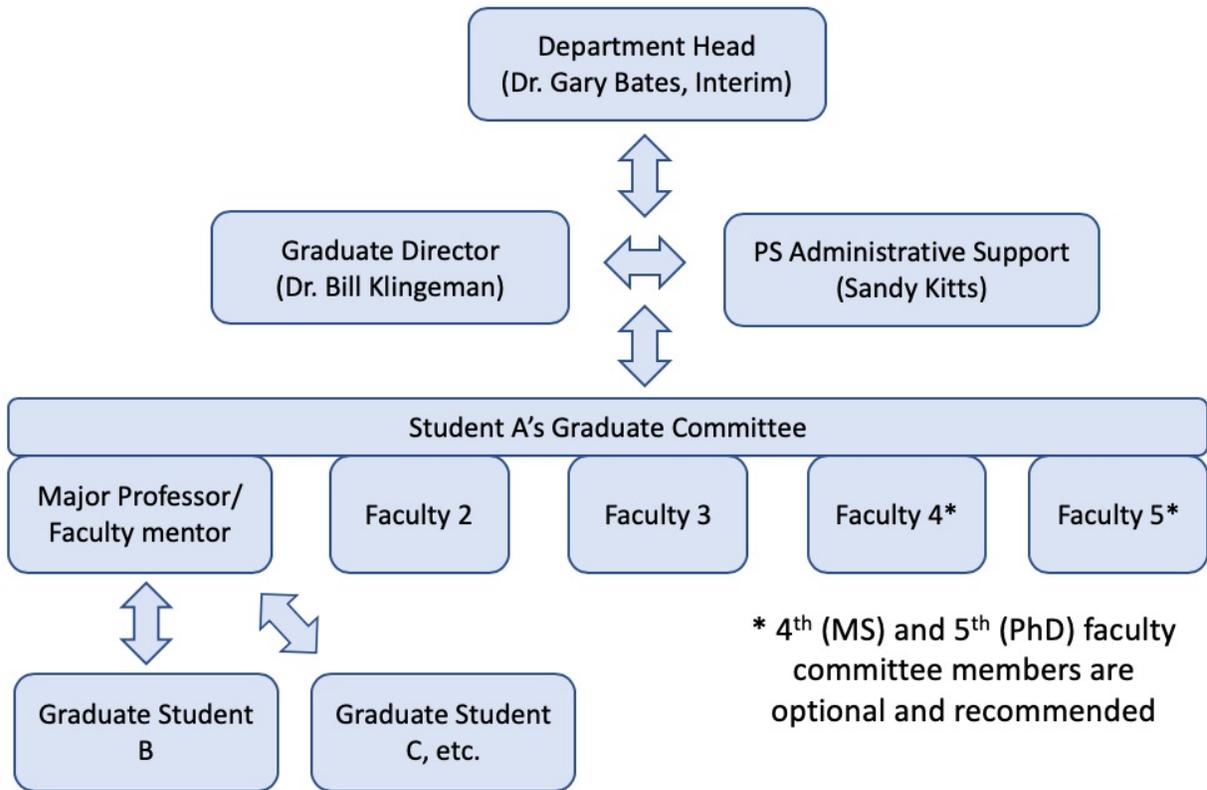
INTEGRITY - We value academic honesty and integrity by all members of the academic community.

LEARNING - We believe that learning is an interpersonal growth experience that fosters appreciation for diversity.

AWARENESS - We believe it is important to recognize how others view and relate to the community and recognize that we are part of a larger community.

RESPONSIVENESS - We encourage all community members to speak out against incidents involving bigotry and other types of incivility so the university can fulfill its responsibility of responding in a fair, timely and consistent fashion.

F. Departmental Flow Chart



GUIDELINES FOR STUDENTS SEEKING GRADUATE DEGREES

II. Master of Science (MS)

Both thesis and project options are available for the major in plant sciences, each guided by a graduate advisory committee consisting of the major professor and two or more other faculty members. Studies are possible across a wide variety of crop commodities, including fruits, vegetables, weeds, cereals, grains, turfgrass, ornamental plants, and public horticulture. Plant sciences students can undertake research to address challenges related to plant protection, molecular biology, breeding, genetics, biotechnology, physiology, ecology, culture, and management. Students must select a formal concentration as a focus of study.

See Appendix II. for a checklist outlining the relevant due dates listed throughout this section.

A. Assistantships

The department provides help to all graduate students by way of furnishing plants, greenhouse space, outdoor research areas, laboratory facilities and equipment. Such aid represents a substantial investment of faculty time, facilities and, funds. Graduate students who are awarded an assistantship are eligible for in-state residency classification. Students classified as out-of-state, or whose status is unclear, may submit an application for residency reclassification. The deadline for submission of the application and supporting documentation is on or before the last day of regular registration. The residency classification officer will review the appeal and send a written response by mail. For more information about residency requirements, visit: <https://registrar.utk.edu/residency/residency.shtml>

Graduate research and teaching assistantships are usually awarded to students before their first semester, during the application process. Assistantships are generally not available to graduate students on the non-thesis option. There is no official provision for annual leave for GAs, GRAs or GTAs. Leaves of absence are permitted by mutual agreement between the graduate assistant and his/her major professor.

1. Graduate Research Assistants (GRA)

Graduate Research Assistants are employees of the University, the Agricultural Experiment Station, and the Department of Plant Sciences. GRAs are responsible to the department head and are under supervision of their major advisor. The GRA contributes to the research program of the Agricultural Experiment Station and at the same time acquires training in research techniques and methods.

The GRAs workload in research is considered to be one-half of a full-time equivalent. Thus, they are required to work approximately 20 hours per week to the project of his/her major professor. The university requires that GRAs on a 12-month appointment maintain full-time status each semester (including Summer). This means that GRAs should register for a minimum of 6 hours of coursework each semester (Spring, Fall) and 3 credit hours (Summer) during their program. Students

may fulfill this requirement in the summer by registering for 3 hours of thesis (PLSC 500).

GRAs are classified as student employees and receive student health insurance. They will also receive student activity cards and are eligible for student athletic tickets and official University holidays.

2. Graduate Teaching Assistants (GTA)

Graduate Teaching Assistants may be employed directly by the Department of Plant Sciences, by the Herbert College of Agriculture, or proportionately by both. GTAs are responsible to the department head and are under supervision of their major advisor. GTAs may assist with departmental teaching and may perform research for their major professor. GTAs who are employed on one-fourth time receive one-fourth the annual stipend and are required to give approximately 10 hours per week of teaching assistance to the department.

GTAs who are employed on one-half time receive a one-half time annual stipend and are required to give approximately 20 hours per week of teaching assistance to the department. The assistant must be continually making progress toward the advanced degree and conducting a thesis study during the course of the degree program.

GTAs are required to attend a University Orientation for Graduate Teaching Assistants the first semester that they are awarded this support. For more information, see the Graduate School webpage: <https://gradschool.utk.edu>.

A special note regarding international teaching assistant test requirements: Prior to interacting with students in a classroom setting, international students who receive a GTA are expected to take and pass an oral proficiency exam: ACTFL OPIc test. Additional information about this test can be reviewed at: <https://gradschool.utk.edu/speaktest.shtml>.

B. Non-Assistantship Students

Full and part-time employees may pursue graduate degrees in Plant Sciences or other UT programs. Procedures for making up work and number of hours per semester are detailed at <https://www.tennessee.edu/humanresources> (Policy No.: HR0330). Students not on assistantship or employed by UT will work with their advisor to determine appropriate courses and research schedules on a case by case basis to ensure a timely progression through the program that also meets the student's employment requirements.

C. Fellowships/Scholarships

Some graduate fellowships may be available through the University or Graduate School. Eligibility requirements, stipends and responsibilities for graduate fellowships are found at the graduate studies website (<https://gradschool.utk.edu/>).

Some scholarships are usually available for students not on assistantships. Applications can be obtained from the Plant Sciences Scholarship Coordinator or from the Herbert College of Agriculture Dean's office. Graduate students may compete for the Hilton A. Smith and National Alumni Association Graduate Fellowships/Scholarships, which are open to all graduate students. The Office of Graduate Admissions can be contacted for information and application forms.

The Office of Financial Aid and Scholarships, at 115 Student Service Building, administers student loans for graduate students.

D. Academic Standards

Students must be fully committed to their graduate program, and are expected to participate in departmental activities, including seminars, outreach functions, and professional development activities, and assume full responsibility for knowledge and compliance with rules and regulations of the Graduate Council and Department.

Retention and continuing access to graduate assistantship and stipend support may be dependent on the student maintaining a 3.0 cumulative grade point average in graduate courses taken at UT and completing other milestones in a timely manner (e.g., forming an advisory committee, completion of coursework, submitting a research proposal, making progress in project or research objectives, and thesis preparation).

Dismissal: In addition to failure to meet UT Graduate School expectations leading to academic probation, other reasons for dismissal include:

- Failure to make adequate progress towards other degree requirements (e.g., research project, dissertation preparation)
- Academic dishonesty (e.g., plagiarism, falsification of data)
- Other forms of gross misconduct as identified by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, *Hilltopics*, or Graduate Council
- Dismissal will be accomplished by written notice to the student with a copy to the Graduate School

Laboratory notebooks, research findings, and other research documents are the property of the University of Tennessee and the major professor and must be freely shared on request from the major professor. Labs are encouraged to develop shared online resources that are sanctioned by the University of Tennessee, such as the UTK Office 365 One Drive and UTK Google Drive through Office 365 (<http://oit.utk.edu/storage/>).

Students must keep in mind that some research is proprietary and confidential; sharing with friends and other unauthorized personnel may be a violation of the agreement the mentor has with the funding entity. It is essential that the level of confidentiality be understood by all parties, since violation could result in the loss of funding.

E. Graduate Advisory Committees will consist of:

- The major professor
- At least two faculty members consisting of one in the department and one from outside the department

Members of the student's graduate committee are expected to contribute expertise relevant to their academic discipline area, to assist in the planning of course work, aid in formulating an appropriate research project, and will assess student achievement and performance toward accomplishing other degree requirements, including the thesis defense.

MS graduate advisory committees are usually established within the first semester of enrollment. Once the graduate advisory committee membership has been established, students are expected to schedule annual committee meetings with their committee. The student's major professor, in consultation with the student's graduate advisory committee, will determine whether appropriate progress has been made during the prior year and will provide the Plant Sciences Graduate Committee chair with a narrative for the student and committee to serve as annual recorded progress.

If the student has a declared minor, one of the advisory committee members must be from the department of the minor field. The student, in cooperation with the major professor, should identify and recruit faculty members to serve on the graduate student's advisory committee by the end of his/her second semester in graduate school.

The advisory committee must sign the Admission to Candidacy form for Master's degree candidates to submit to the Graduate School prior to the semester in which they plan to graduate.

F. Proposal

Each student must submit a written proposal for the research problem or creative achievement to be undertaken in his/her graduate program. A topic should be identified, and a proposal prepared and submitted to the student's graduate advisory committee no later than the third semester (not counting summers) in graduate school.

During the research proposal stage, students should determine the equipment, supplies, time and other resources required for successful completion of the project and should ensure that they have adequate training and access to the equipment, as well as funding for other required resources. This planning component of the research is done in close consultation with the major professor or academic advisor. After the student and major professor have refined the proposal to their joint satisfaction, copies should be distributed to the student's advisory committee. The student should then schedule a meeting of the committee to receive suggestions and direction on the proposed research plan. Typically, the graduate student will present a departmental seminar describing the proposed research. The process works most efficiently when the graduate student's advisory committee is able to review the research proposal and proposed program of study during the same meeting.

G. Course Requirements:

- 1. Thesis Option:** minimum of 30 graduate credit hours
 - PLSC 500 (6 credit hours)
 - At least 14 of these credit hours must be numbered 501 or above

During the semester in which your thesis is accepted, you must be enrolled in 3 hours of PLSC 500. The official policy of the Graduate School is that MS students should be enrolled in one or more hours of PLSC 500 during every semester that they work on their

thesis, use UTK facilities and/or consult with their major professor about their research. Students may register for up to 15 thesis hours.

2. Project Option: minimum of 34 graduate credit hours

- PLSC 503 (2 to 4 credit hours)
- At least 22 of the 34 credit hours must be at the 500 level or above

It is expected that each graduate student will enroll in one or more statistics courses to become familiar with statistical methods used in agricultural and biological research. The selection of courses should be discussed with the major professor and approved by the students' graduate advisory committee.

Plant Sciences offers several courses and out-of-the-department courses can also be taken towards your degree. The coursework must be accepted by your major advisor. The course list and descriptions can be found at the <https://catalog.utk.edu/content.php?catoid=30&navoid=3880>.

H. Additional Course Requirements:

1. Research Ethics achieved through either:

- Coursework (e.g., PLSC 525; ANSC 525; CEM 525; BCMB 614; PSYC 660)
- Knowledge gained via online (CITI RCR) training, as evidenced by presenting a valid CITI RCR certificate completed by the end of the third academic semester

2. Chemical Safety Training must be completed for students undertaking laboratory research and projects involving chemical use/exposure by the end of their first academic semester.

If approved by the graduate student's advisory committee, graduate level courses taken at another institution (that were not used to meet degree requirements for a previous degree) may be used to meet specific coursework requirements.

I. Non-course Requirements:

1. Thesis Option

- Approval of an acceptable master's graduate student advisory committee
- If a minor is sought from another program, the student's graduate advisory committee must include a faculty member from the minor department
- Approval of the academic program by the master's advisory committee
- Satisfactory preparation of a written thesis proposal and its oral defense to the student's advisory committee
- Satisfactory preparation of a written thesis and its oral defense to the student's graduate advisory committee

2. Project Option

- Approval of an acceptable master’s graduate student advisory committee
- If a minor is sought from another program, the student’s advisory committee must include a faculty member from the minor department
- Satisfactory completion of a project, preparation of a written report summarizing the project, and its oral defense to the student’s advisory committee
- Passing written and oral examinations covering the project and course work

J. Credit Hours per Semester

Registration is required of all graduate students when using University facilities and/or faculty time. Registration allows the use of services such as library services, laboratories, and recreation facilities not open to the public. The credit hour requirements of full-time graduate students* are listed below.

* **Please Note!**: Academic and Human Resources of “full-time” and “half-time” student status DIFFER. The majority of Plant Sciences graduate students on GRAs funded by their mentor or grants are “full-time” graduate students. In the chart below, these appointments are equivalent to a ½-time assistantship, according to Human Resources definitions. Plant Sciences GTAs generally are awarded on a per-semester basis, and these are offered as ¼-time assistantships (equivalent to “half-time graduate teaching assistants”).

	Non-assistantship		¼-time assistantship		½-time assistantship	
	Fall/Spring	Summer	Fall/Spring	Summer	Fall/Spring	Summer
Minimum	9	1	9	1*	6	1*
Maximum	15	12	15	12	15	12

* The minimum number of hours for registration is one. **However, students on assistantships must sign up for a minimum of 3 hours in their final semester. Students seeking to be exempt from FICA and Medicare taxes during summer sessions should plan ahead to ensure that summer enrollment credit hours are appropriate to degree objectives, and that they have permission of their faculty advisor for the hours of enrollment.**

**** Please Note²:** International Students must consult with a CIE advisor before taking less than a full-time load. In some cases, a student must get permission ahead of time.

- When a graduate student has completed all course work requirements and is only working on thesis or dissertation hours, registering for 3 credit hours is sufficient for immigration purposes. The student must obtain permission from CIE before being enrolled part-time (HR-basis). (See **Note¹** on difference in Academic definition above).
- In the final term of a degree program, a student can register for only the number of hours required to graduate (zero hours is not acceptable). The student must obtain permission from CIE before being enrolled part-time (HR-basis). (See **Note¹** on difference in academic definition above).
- A student who has a medical condition can be enrolled less than full-time or not at all in some cases. A letter from a licensed medical doctor explaining the reasons must be turned in. The student must obtain permission from CIE before dropping below full-time.

K. Enrollment in (and Withdrawal from) Courses

Course schedules after the first semester **MUST** be approved by the major professor and the graduate committee before enrollment in classes. The student's graduate committee should have full input into the course of study. Enrollment in extra courses not approved by the advisor or committee costs the department significant funds that could otherwise be used to support another student and may result in the removal of the GRA/GTA tuition waiver.

Graduate students must seek major professor approval and provide a reasonable explanation for the action of withdrawing from classes in which the student has enrolled. Withdrawal from a class or classes without your faculty advisor's permission may result in personal responsibility for the costs associated with course maintenance (tuition) fees.

L. Evaluation of Student Progress

Graduate student progress will be evaluated once per year by the major professor in consultation with the student's graduate advisory committee members. Students must maintain a 3.0 grade point average and receive a satisfactory review of progress by the student's graduate committee. The review is intended to annually document discussions between the student and the major professor and should be copied to the chair of the Plant Sciences Graduate Committee. Once the graduate program and project, thesis or dissertation topic have been determined, the student is required to schedule an annual committee meeting to review the student's program and plan of work.

Flexibility within the graduate program allows variation among individual courses of study, but students are expected to make satisfactory progress in acquiring knowledge of a subject area and in completing degree requirements. The student and major professor should have a mutual understanding of what each is expected to contribute to the program of graduate study. A student's graduate study may be terminated if progress is unsatisfactory. Appeals normally are made through the Department Head to the University administration. The Graduate Council Appeal Procedure should be consulted. The student handbook, *Hilltopics*, includes UTK standards of conduct, policies on disciplinary action, and procedures for appeals.

M. Academic Probation

Upon completion of nine hours of graduate coursework, a graduate student will be placed on academic probation when his or her cumulative GPA falls below 3.0. A student will be allowed to continue graduate study in subsequent semesters if each semester's grade point average is 3.0 or greater. Upon achieving a cumulative GPA of 3.0, the student will be removed from probationary status.

N. Dismissal

In addition to failure to meet UT Graduate School expectations leading to academic probation (e.g., a student earning <3.0 semester GPA while on academic probation), other reasons for dismissal include failure to make adequate progress towards other degree requirements (e.g., research project, thesis/dissertation preparation), academic dishonesty (e.g., plagiarism, falsification of data), or other forms of gross misconduct as identified by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, *Hilltopics*, or Graduate Council. Dismissal will be accomplished by written notice to the student with a copy to the Graduate School.

O. Termination of Financial Support

Termination of financial support can occur, and is done by the following process, if performance reviews with your major professor find any of the following

- A grade of NP in PLSC 500
- Grades of D or F, or a W without pre-approval of your advisory committee
- Academic probation
- Failure to complete degree requirements within the time frames specified in this handbook
- Inadequate performance of assigned duties or research activities

Such performance lapses MAY result in termination of financial support. A major professor may initiate this termination of financial support process without involving the Plant Science Graduate Committee by working directly with the Department Head and Graduate Director. This will typically occur when the student is being funded by the major professor, as opposed to departmentally-funded assistantships.

The Department Head, and Plant Sciences Graduate Committee (when involved), have the flexibility to consider any additional factors (including source of financial support) in making a final recommendation. If the department head is in agreement with the major professor and/or Graduate Committee recommendation, the Department Head sends a written notice of termination of financial support to the student, with copies to the major professor and Graduate Director. In most cases 30-day notice is given, such that the student will receive a final monthly paycheck at least 30 days after written notice is sent. However, if performance is very inadequate, termination can be immediate, even within a semester. For example, this can occur if you are essentially absent from all duties, making no research progress or are not available for assistantship duties. It is strongly recommended that you meet frequently with your major professor to keep them informed of your activities.

P. Thesis

The final draft of the non-thesis report or thesis must be distributed to all advisory committee members at least **TWO WEEKS** prior to final examination date. The thesis may be in a traditional format or presented as a series of journal articles. Confer with your major professor to determine the formatting style for your thesis. Please refer to the “Guide to the Preparation of Theses and Dissertations” (<https://gradschool.utk.edu/documents/2016/03/guide-to-thesesdissertations.pdf/>) for formatting guidelines required by The Graduate School.

Q. Project Option

In lieu of completing a thesis, requirements for students in the project option MS include:

- Satisfactory completion of a project, preparation of a written report summarizing the project, and its oral defense to the student’s graduate advisory committee
- Passing written and oral examinations covering the project and course work

R. Defense

Students are responsible for scheduling final oral & written (MS non-thesis) exams. All exams must be held at least **TWO WEEKS** before the final date for acceptance & thesis approval by Office of Graduate Student Services on the Graduate Council’s behalf. Visit <https://gradschool.utk.edu/graduation/graduation-deadlines/> to determine the graduation deadlines for the term in which you intend to graduate.

Upon approval of a thesis, students must complete the “Report of Defense of Thesis” form (<https://gradschool.utk.edu/documents/2016/02/report-of-final-examination-defense-of-thesisprojectcapstone-Master’s-or-specialist-degree.pdf/>) and “Thesis Approval Form” (<https://gradschool.utk.edu/forms-central/thesisdissertation-approval/>).

S. Length of Appointment and Time Limits

Graduate assistantships for the MS are expected to complete their degree in a minimum of two years. The Graduate School has established a **six-year time limit** for the completion of a MS degree, starting at the beginning of the semester of the first course counted toward the degree.

T. Graduation

Students must apply for graduation. Please visit (<https://registrar.utk.edu/graduation-overview/graduation-application-deadlines/>) to determine the appropriate time to apply for graduation. The cost will be \$30 for MS students. The graduation fee is non-refundable and is valid for three semesters after the semester in which it is paid.

U. Checklist for Leaving the Department and University

- _____ Put your name, date, and clear labels on all freezer stocks, experimental standards, etc.
- _____ Provide your major professor with backup data and thesis/dissertation text files
- _____ Clear office desk & lab workspaces
- _____ Inform Sandy Kitts of your final date of employment
- _____ Submit to Sandy Kitts a PDF file containing your thesis/dissertation title page, abstract, & signed committee page
- _____ Return all university & departmental keys
- _____ Pay all relevant university & departmental fees
- _____ Provide Sandy Kitts with your alumni contact information for forwarding mail, job announcements, & referrals

V. Graduate School Admission Requirements

Please refer to The Graduate School for admission requirements and procedures (<https://gradschool.utk.edu/admissions/applying-to-graduate-school/>). A \$60 non-refundable fee is due for prospective graduate students with each first-time admissions application.

W. Departmental Admission Requirements

In addition to the admission requirements by the Graduate School, the Department of Plant Sciences requires the following for admission:

- GRE results
- Statement of interest
- Updated CV
- Professional biosketch
- Three references

These portions of the application are uploaded, and contacts to the three references are initiated, within the online application actions. Please do not send these portions directly to the Department or Graduate Director. Do contact the Graduate Director about problems that you may encounter with the online application process, particularly regarding difficulty with attachment upload or necessary updates to these portions of the application.

III. Doctor of Philosophy (PhD)

A. PhD Degree Requirements

The Doctor of Philosophy with a major in plant, soil, and environmental sciences and concentrations in crop sciences, horticulture, plant breeding, plant molecular genetics, and weed science is offered under a multi-departmental doctoral program. Two departments participate – Plant Sciences and the soils faculty in Biosystems Engineering and Soil Science. Another concentration within the plant, soil and environmental sciences major is environmental and soil sciences.

Students must select a formal concentration as a focus of study. We recognize that modern research approaches in plant sciences often overlap. Students may specialize in one or more approaches, including plant biotechnology, molecular biology, breeding, genetics, physiology, ecology, culture, and management. Research approaches may be applied to model plant systems, public horticulture, turfgrass, weeds, or woody ornamental plants, as well as fruit, vegetable, cereal, grain, or fiber crops. One of the following concentrations is required:

- Crop Sciences
- Horticulture
- Plant Breeding
- Plant Molecular Genetics
- Weed Science

See Appendix II. for a checklist outlining the relevant due dates listed throughout this section.

B. Assistantships

The department provides help to all graduate students by way of furnishing plants, greenhouse space, outdoor research areas, laboratory facilities, and equipment. Such aid represents a substantial investment of faculty time, facilities, and funds. Graduate students who are awarded an assistantship are eligible for in-state residency classification. Students classified as out-of-state, or whose status is unclear, may submit an application for residency reclassification. The deadline for submission of the application and supporting documentation is on or before the last day of regular registration. The residency classification officer will review the appeal and send a written response by mail. For more information about residency requirements, visit: <https://registrar.utk.edu/residency/residency.shtml>.

Graduate research and teaching assistantships are usually awarded to students before their first semester, during the application process. Assistantships are generally not available to graduate students on the non-thesis option. There is no official provision for annual leave for GAs, GRAs or GTAs. Leaves of absence are permitted by mutual agreement between the graduate assistant and his/her major professor.

1. Graduate Research Assistants (GRA)

Graduate Research Assistants are employees of the University, the Agricultural Experiment Station, and the Department of Plant Sciences. GRAs are responsible to the department head and are under supervision of their major advisor. The GRA contributes to the research program of the Agricultural Experiment Station and at the same time acquires training in research techniques and methods.

The GRAs workload in research is considered to be one-half of a full-time equivalent. Thus, they are required to work approximately 20 hours per week to the project of his/her major professor. The university requires that GRAs on a 12-month appointment maintain full-time status each semester (including Summer). This means that GRAs should register for a minimum of 6 hours of coursework each semester (Spring, Fall) and 3 credit hours (Summer) during their program. Students may fulfill this requirement in the summer by registering for 3 hours of dissertation (PLSC 600). Students can only enroll in PLSC 600 following the submission of a research proposal.

GRAs are classified as student employees and receive student health insurance. They will also receive student activity cards and are eligible for student athletic tickets and official University holidays.

2. Graduate Teaching Assistants (GTA)

Graduate Teaching Assistants may be employed directly by the Department of Plant Sciences, by the Herbert College of Agriculture, or proportionately by both. GTAs are responsible to the department head and are under supervision of their major advisor. GTAs may assist with departmental teaching and may perform research for their major professor. GTAs who are employed on one-fourth time receive one-fourth the annual stipend and are required to give approximately 10 hours per week of teaching assistance to the department.

GTAs who are employed on one-half time receive a one-half time annual stipend and are required to give approximately 20 hours per week of teaching assistance to the department. The assistant must be continually making progress toward the advanced degree and conducting a thesis study during the course of the degree program.

GTAs are required to attend a University Orientation for Graduate Teaching Assistants the first semester that they are awarded this support. For more information, see the Graduate School webpage: <https://gradschool.utk.edu>.

A special note regarding international teaching assistant test requirements: Prior to interacting with students in a classroom setting, international students who receive a GTA are expected to take and pass an oral proficiency exam: ACTFL OPIc test. Additional information about this test can be reviewed at: <https://gradschool.utk.edu/documents/2016/03/opic-faq.pdf>.

C. Non-Assistantship Students

Full and part-time employees may pursue graduate degrees in Plant Sciences or other UT programs. Procedures for making up work and number of hours per semester are detailed at <https://www.tennessee.edu/humanresources> (Policy No.: HR0330). Students not on assistantship or employed by UT will work with their advisor to determine appropriate courses and research schedules on a case by case basis to ensure a timely progression through the program that also meets the student's employment requirements.

D. Fellowships/Scholarships

Some graduate fellowships may be available through the University or Graduate School. Eligibility requirements, stipends, and responsibilities for graduate fellowships are found at the graduate studies website (<https://gradschool.utk.edu/>).

Some scholarships are usually available for students not on assistantships. Applications can be obtained from the Plant Sciences Scholarship Coordinator or from the Herbert College of Agriculture Dean's office. Graduate students may compete for the Hilton A. Smith and National Alumni Association Graduate Fellowships/Scholarships, which are open to all graduate students. The Office of Graduate Admissions can be contacted for information and application forms.

The Office of Financial Aid and Scholarships, at 115 Student Service Building, administers student loans for graduate students.

E. Academic Standards

Students must be fully committed to their graduate program, are expected to participate in departmental activities, including seminars, outreach functions, and professional development activities, and assume full responsibility for knowledge and compliance with rules and regulations of the Graduate Council and Department.

Retention and continuing access to graduate assistantship and stipend support may be dependent on the student maintaining a 3.0 cumulative grade point average in graduate courses taken at UT and completing other milestones in a timely manner (e.g., forming an advisory committee, completion of coursework, submitting a research proposal, making progress in project or research objectives, and thesis preparation).

Dismissal: In addition to failure to meet UT Graduate School expectations leading to academic probation, other reasons for dismissal include:

- Failure to make adequate progress towards other degree requirements (e.g., research project, dissertation preparation)
- Academic dishonesty (e.g., plagiarism, falsification of data)
- Other forms of gross misconduct as identified by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, *Hilltopics*, or Graduate Council
- Dismissal will be accomplished by written notice to the student with a copy to the Graduate School

Laboratory notebooks, research findings, and other research documents are the property of the University of Tennessee and the major professor and must be freely shared on request from the major professor. Labs are encouraged to develop shared online

resources that are sanctioned by the University of Tennessee, such as the UTK Office 365 One Drive and UTK Google Drive through Office 365 (<http://oit.utk.edu/storage/>).

Students must keep in mind that some research is proprietary and confidential; sharing with friends and other unauthorized personnel may be a violation of the agreement the mentor has with the funding entity. It is essential that the level of confidentiality be understood by all parties, since violation could result in the loss of funding.

F. Graduate Advisory Committee

Doctoral advisory committees must be composed of at least four faculty members, three of whom, including the chair, must be approved by the Graduate Council to direct doctoral research. At least one member must be from a department other than that of the student's major field. The student, in consultation with his/her major professor, should submit the "PhD Committee Form" (<https://gradschool.utk.edu/forms-central/phd-committee-form/>) to the Department Head for approval by the end of the second semester in graduate school.

The advisory committee is responsible for administering Comprehensive Examinations (written and oral) and certifying the student's mastery of the major and collateral fields. In addition, the advisory committee must approve all coursework applied toward the degree, certify the student's defense of the dissertation, and recommend the dissertation for acceptance by the Graduate School.

G. Proposal

Each student must submit a written proposal for the research problem or creative achievement to be undertaken in his/her graduate program. A topic should be identified, and a proposal prepared and submitted to the student's graduate advisory committee no later than the fifth semester (not counting summers) in graduate school.

During the research proposal stage, students should determine the equipment, supplies, time, and other resources required for successful completion of the project and should ensure that they have adequate training and access to the equipment, as well as funding for other required resources. This planning component of the research is done in close consultation with the major professor or academic advisor. After the student and major professor have refined the proposal to their joint satisfaction, copies should be distributed to the student's advisory committee. The student should then schedule a meeting of the advisory committee to receive suggestions and direction on the proposed research plan. Typically, the graduate student will present a departmental seminar describing the proposed research. The process works most efficiently when the graduate student's advisory committee is able to review the research proposal and proposed program of study during the same meeting.

H. Credit Hours Required:

- 72 graduate credit hours beyond a Bachelor's Degree
- 48 graduate credit hours beyond a Master's Degree

I. Required Courses

- PLSC 600* (24 credit hours)
- A minimum of 12 of the 24 credit hours (beyond the Master's), or 30 of the 48 credit hours (beyond the Bachelor's), must be graded A-F.
- Graded, program elective coursework will be selected by the student in consultation with the major advisor and advisory committee. Choice of courses associated with program electives are project/research based, may be from PLSC and from disciplines outside the major, including:
 - AGNR (Agriculture and Natural Resources)
 - ALEC (Agricultural Leadership, Education and Communications)
 - ANSC (Animal Sciences)
 - AREC (Agricultural and Resource Economics)
 - BCMB (Biochemistry and Molecular Biology)
 - CSE (Cultural Studies in Education)
 - EPP (Entomology and Plant Pathology)
 - ESS (Environmental and Soil Sciences)
 - EEB (Ecology and Evolutionary Biology)
 - FDSC (Food Science), FORS (Forestry)
 - FWF (Forestry, Wildlife, and Fisheries)
 - LAR (Landscape Architecture)
 - LFSC (Life Sciences), MICR (Microbiology)
 - STAT (Statistics)
 - TPTE (Theory and Practice in Teacher Education)
- A minimum of 6 credit hours of courses numbered 601 or higher must be taken at the University of Tennessee, excluding PLSC 602.
- If approved by the graduate student's advisory committee, graduate level courses taken at another institution may be used to meet specific coursework requirements.

*PhD students must register continuously for course PLSC 600 Doctoral Research/Dissertation (minimum of 3 hours) each semester from the time the doctoral research proposal is approved, admission to candidacy is accepted, or registration for course PLSC 600 is begun, whichever comes first, including summer semester and the semester in which the dissertation is approved and accepted by the Graduate School. A minimum total of 24 hours of course PLSC 600 is required before the dissertation will be accepted. A student who will not be using faculty services and/or university facilities for a period of time may request leaves of absence from dissertation research up to a maximum of six terms (including summer terms). The request, approved by the major professor, will be submitted by the student and filed in the Registrar's Office.

The Plant Sciences offers several courses and out of the department courses can also be taken towards your degree. The coursework must be accepted by your major advisor. The course list and descriptions can be found at: <https://catalog.utk.edu/content.php?catoid=30&navoid=3880>.

J. Additional Course Requirements:

1. Research Ethics achieved through either:

- Coursework (e.g., PLSC 525; ANSC 525; CEM 525; BCMB 614; PSYC 660)
- Knowledge gained via online (CITI RCR) training, as evidenced by presenting a valid CITI RCR certificate completed by the end of the third academic semester

2. Chemical Safety Training must be completed for students undertaking laboratory research and projects involving chemical use/exposure by the end of their first academic semester.

If approved by the graduate student's advisory committee, graduate level courses taken at another institution (that were not used to meet degree requirements for a previous degree) may be used to meet specific coursework requirements.

K. Credit Hours per Semester

Registration is required of all graduate students when using University facilities and/or faculty time. Registration allows the use of services such as library services, laboratories, and recreation facilities not open to the public. The credit hour requirements of full-time graduate students* are listed below.

* **Please Note!**: Academic and Human Resources of “full-time” and “half-time” student status DIFFER. The majority of Plant Sciences graduate students on GRAs funded by their mentor or grants are “full-time” graduate students. In the chart below, these appointments are equivalent to a ½-time assistantship, according to Human Resources definitions. Plant Sciences GTAs generally are awarded on a per-semester basis, and these are offered as ¼-time assistantships (equivalent to “half-time graduate teaching assistants”).

	Non-assistantship		¼-time assistantship		½-time assistantship	
	Fall/Spring	Summer	Fall/Spring	Summer	Fall/Spring	Summer
Minimum***	9	1	9	1*	6	1*
Maximum	15	12	15	12	15	12

* The minimum number of hours for registration is one. **However, students on assistantships must sign up for a minimum of 3 hours in their final semester. Students seeking to be exempt from FICA and Medicare taxes during summer sessions should plan ahead to ensure that summer enrollment credit hours are appropriate to degree objectives, and that they have permission of their faculty advisor for the hours of enrollment.**

**** Once Doctoral students have begun taking credit hour enrollment in PLSC 600 Dissertation, must continue to enroll in 3 credit hours of PLSC 600 each semester, including Summer. *To avoid incurring added tuition costs, students are encouraged to take credit hours later in their degree programs (e.g., starting with their 4th or 5th semester). Consult with your faculty mentor before enrolling in PLSC 600.***

***** *Please Note*²:** International Students must consult with a CIE advisor before taking less than a full-time load. In some cases, a student must get permission ahead of time.

- When a graduate student has completed all coursework requirements and is only working on thesis or dissertation hours, registering for 3 credit hours is sufficient for immigration purposes. The student must obtain permission from CIE before being enrolled part-time (HR-basis). (See **Note**¹ on difference in Academic definition above).
- In the final term of a degree program, a student can register for only the number of hours required to graduate (zero hours is not acceptable). The student must obtain permission from CIE before being enrolled part-time (HR-basis). (See **Note**¹ on difference in Academic definition above).
- A student who has a medical condition can be enrolled less than full-time or not at all in some cases. A letter from a licensed medical doctor explaining the reasons must be turned in. The student must obtain permission from CIE before dropping below full-time.

L. Enrollment in (and Withdrawal from) Courses

Course schedules after the first semester **MUST** be approved by the major professor and the graduate committee before enrollment in classes. The student's graduate committee should have full input into the course of study. Enrollment in extra courses not approved by the advisor or committee costs the department significant funds that could otherwise be used to support another student and may result in the removal of the GRA/GTA tuition waiver.

Graduate students must seek major professor approval and provide a reasonable explanation for the action of withdrawing from classes in which the student has enrolled. Withdrawal from a class or classes without your faculty advisor's permission may result in personal responsibility for the costs associated with course maintenance (tuition) fees.

M. Evaluation of Student Progress

Graduate student progress will be evaluated once per year by the major professor in consultation with the student's graduate advisory committee members. Students must maintain a 3.0 grade point average and receive a satisfactory review of progress by the student's graduate advisory committee. The review is intended to annually document discussions between the student and the major professor and should be copied to the chair of the Plant Sciences Graduate Committee. Once the graduate program and project, thesis or dissertation topic have been determined, the student is required to schedule an annual advisory committee meeting to review the student's program and plan of work.

Flexibility within the graduate program allows variation among individual courses of study, but students are expected to make satisfactory progress in acquiring knowledge of a subject area and in completing degree requirements. The student and major professor should have a mutual understanding of what each is expected to contribute to the program of graduate study. A student's graduate study may be terminated if progress is unsatisfactory. Appeals normally are made through the Department Head to the University administration. The Graduate Council Appeal Procedure should be consulted. The student handbook, *Hilltopics*, includes UTK standards of conduct, policies on disciplinary action, and procedures for appeals.

N. Academic Probation

Upon completion of nine hours of graduate coursework, a graduate student will be placed on academic probation when his or her cumulative GPA falls below 3.0. A student will be allowed to continue graduate study in subsequent semesters if each semester's grade point average is 3.0 or greater. Upon achieving a cumulative GPA of 3.0, the student will be removed from probationary status.

O. Dismissal

In addition to failure to meet UT Graduate School expectations leading to academic probation (e.g., a student earning <3.0 semester GPA while on academic probation), other reasons for dismissal include failure to make adequate progress towards other degree requirements (e.g., research project, thesis/dissertation preparation), academic dishonesty (e.g., plagiarism, falsification of data), or other forms of gross misconduct as identified by the Office of Equity and Diversity, Human Resources, Dean of Students' Office, *Hilltopics*, or Graduate Council. Dismissal will be accomplished by written notice to the student with a copy to the Graduate School.

P. Termination of Financial Support

Termination of financial support can occur, and is done by the following process, if performance reviews with your major professor find any of the following

- A grade of NP in PLSC 600
- Grades of D or F, or a W without pre-approval of your graduate advisory committee
- Academic probation
- Failure to complete degree requirements within the time frames specified in this handbook

- Inadequate performance of assigned duties or research activities

Such performance lapses MAY result in termination of financial support. A major professor may initiate this termination of financial support process without involving the Plant Science Graduate Committee by working directly with the Department Head and Graduate Director. This will typically occur when the student is being funded by the major professor, as opposed to departmentally-funded assistantships.

The Department Head, and Plant Sciences Graduate Committee (when involved), have the flexibility to consider any additional factors (including source of financial support) in making a final recommendation. If the department head is in agreement with the major professor and/or Graduate Committee recommendation, the Department Head sends a written notice of termination of financial support to the student, with copies to the major professor and Graduate Director. In most cases a 30-day notice is given, such that the student will receive a final monthly paycheck at least 30 days after written notice is sent. However, if performance is very inadequate, termination can be immediate, even within a semester. For example, this can occur if you are essentially absent from all duties, making no research progress or are not available for assistantship duties. It is strongly recommended that you meet frequently with your major professor to keep them informed of your activities.

Q. Comprehensive Preliminary Examinations

Each PhD student must satisfactorily pass a written and oral candidacy examination, administered by their advisory committee, covering their discipline and supporting areas. Each examination will require no longer than two days for completion, and all written examinations will be completed within a one- or two-week period. Each advisory committee member will determine whether his or her questions are to be answered open or closed book. The oral examination should be scheduled only after all written comprehensive examinations have been completed and passed. The exam must be passed at least **ONE SEMESTER** before completion of the degree. The student is allowed two attempts at passing the preliminary examinations.

Each member of the student's graduate advisory committee will be asked to submit a list of exam questions to the chair (major professor). These questions will serve as the written examination for that advisory committee member. After each written examination is taken, the advisory committee chair will deliver the student's written response to the originating member. This member will grade the examination and return it to the chair with the indication of pass or fail. If the student passes all written examinations, the chair will then schedule an oral examination. The advisory committee will serve as the examining committee. If the student passes the oral examination, he/she is eligible and applies for admission to candidacy for the PhD degree by completing the "Admission to Candidacy – Doctoral Degree" form (<https://gradschool.utk.edu/forms-central/admission-to-candidacy-doctoral-degree/>).

Prior to the applying for candidacy, **you must have three consecutive semesters (including summer) with 6 credit hours, or two consecutive semesters with 9 credit hours to meet [The Graduate School's Residency Requirement](#). Therefore, make sure*

you have met those requirements before applying for the candidacy and proceeding with the exams. Discuss this information with your major advisor.

R. In the Event of Failure of Exam(s)

If the student fails one or more of the written examinations, the chair will convene the advisory committee to discuss an appropriate course of action. Alternatives that may be considered include:

- Administering another written examination in the area that the student failed
- After giving the student additional time for preparation; requiring additional coursework prior to administering an additional written examination in each of the areas failed
- Proceeding with the oral examination with the understanding that appropriate remedial action will be required before admission to candidacy

If the student fails any of the written examination(s) for a second time, the student is dismissed from the graduate program. Likewise, if the student fails the oral examination a second time, the student is dismissed from the program.

S. Appeals process

If a student feels he/she has been treated unfairly during any stage of the examination process, he/she has the right to appeal to the Department Head. The Department Head will review the examinations in question, seek advice from other departmental members and meet with the student's graduate advisory committee to discuss the student's problems. The Department Head can suggest a re-examination, uphold the decision of the committee, or propose alternative solutions. The Graduate School provides and administers further appeal procedures.

T. Dissertation

The final draft of the dissertation must be distributed to all advisory committee members at least **TWO WEEKS** prior to final examination date. The dissertation may be in a traditional format or presented as a series of journal articles. Confer with your major professor to determine the formatting style for your thesis. Please refer to the "Guide to the Preparation of Theses and Dissertations" (<https://gradschool.utk.edu/documents/2016/03/guide-to-thesesdissertations.pdf/>) for formatting guidelines required by The Graduate School.

U. Defense

Students are responsible for scheduling final oral examinations. All exams must be held at least **TWO WEEKS** before the final date for acceptance & thesis approval by Office of Graduate Student Services on the Graduate Council's behalf. Visit <https://gradschool.utk.edu/graduation/graduation-deadlines/> to determine the graduation deadlines for the term in which you intend to graduate.

Upon approval of a thesis, students must obtain complete the "Report of Defense of Thesis" form (<https://gradschool.utk.edu/documents/2016/02/report-of-final->

[examinationdefense-of-thesisprojectcapstone-Master's-or-specialist-degree.pdf/](#) and “Thesis Approval Form” (<https://gradschool.utk.edu/forms-central/thesisdissertation-approval/>).

V. Length of Appointment and Time Limits

Graduate assistantships for the PhD are expected to complete their degree in a minimum of three years. Candidates for doctoral degrees must complete all comprehensive examinations within **FIVE YEARS** of their matriculation, and all requirements must be completed within **EIGHT YEARS** from the time of a student’s first enrollment in a doctoral degree program.

W. Graduation

Students must apply for graduation. Please visit (<https://registrar.utk.edu/graduation-overview/graduation-application-deadlines/>) to determine the appropriate time to apply for graduation. The cost will be \$75 for PhD students. The graduation fee is non-refundable and is valid for three semesters after the semester in which it is paid.

X. Checklist for Leaving the Department and University

- _____ Put your name, date, and clear labels on all freezer stocks, experimental standards, etc.
- _____ Provide your major professor with backup data and thesis/dissertation text files
- _____ Clear office desk & lab workspaces
- _____ Inform Sandy Kitts of your final date of employment
- _____ Submit to Sandy Kitts a PDF file containing your thesis/dissertation title page, abstract & signed committee page
- _____ Return all university & departmental keys
- _____ Pay all relevant university & departmental fees
- _____ Provide Sandy Kitts with your alumni contact information for forwarding mail, job announcements, & referrals

Y. Graduate School Admission Requirements

Please refer to The Graduate School for admission requirements and procedures (<https://gradschool.utk.edu/admissions/applying-to-graduate-school/>). A \$60 nonrefundable fee is due for prospective graduate students with each first-time admissions application.

Z. Departmental Admission Requirements

In addition to the admission requirements by the Graduate School, the Department of Plant Sciences requires the following for admission:

- GRE results
- Statement of interest
- Updated CV

- Professional biosketch
- Three references

These portions of the application are uploaded, and contacts to the three references are initiated, within the online application actions. Please do not send these portions directly to the Department or Graduate Director. Do contact the Graduate Director about problems that you may encounter with the online application process, particularly regarding difficulty with attachment upload or necessary updates to these portions of the application.

IV. Departmental Procedures, Policies, and Helpful Information

A. Student Award Incentive Program

As peers, PS Faculty would like to acknowledge the exceptional accomplishments of our graduate students and we expect this program to help showcase the successes of the PS Department. This program is intended to promote professional association membership and encourage student participation in oral & poster competitions at Regional, National, & International professional meetings.

The Plant Sciences Faculty and donors established a Plant Sciences Departmental Account allowing us to reward exceptional efforts of PS graduate students who win monetary prizes for oral & poster presentations at regional, national, & international professional meetings. The Award Incentive Program will match (up to \$300) monetary prizes awarded to PS graduate students. Eligibility for the incentive program includes:

- Plant Sciences MS and PhD students whose major professor is from Plant Sciences are eligible for matching awards
- The Department of Plant Sciences' Account will match individual awards up to \$300 per year per student project
- In the case of team-projects, award match applies only to the presenter
- Matching funds do not apply to Department, Institute, or University awards
- Matching funds do not apply in the case of travel, scholarship, or fellowship awards
- At least initially, awards from state-based professional associations are not eligible to receive matching funds
- Currently we limit awards to 3 per student on separate projects undertaken during each graduate Plant Sciences degree program
- PS graduate students must win a cash award for an oral or display presentation given at regional, national, and international professional meetings
- Students who win awards should work with their major professor and the PS graduate coordinator to initiate the process with the help of PS Department accountants
- The award must be taxed as regular income
- If the recipient is an active UT employee (student worker or on-assistantship) they must be paid via the UT Payroll System using an Additional Service pay form. If the

recipient is not a UT employee, they must submit a T-27 form through PS Accounting Office

To begin requisite paperwork to establish a matching award, contact Dr. Bill Klingeman (wklingem@utk.edu).

B. Fees and Tax Implications

Major fee categories established by the University are maintenance fees, non-resident tuition, and program and services fees. The amounts of these fees are determined annually and can be accessed here: <https://onestop.utk.edu/tuition-detail/>. Program and services fees support educational and non-educational services provided by the University and are required of all students.

Part-time students may pay less than the maximum amount, depending on the number of hours taken. Fees and expenses for the summer semester are the same as for other semesters during the academic year. Although the summer term is divided into sessions of varying lengths, tuition and fees are assessed at the regular semester-hour rate up to the maximum charge for a complete regular semester. All student fees are due in advance and should be paid in full by the due date shown on the billing statement. Consult the graduate catalog for details regarding prepayment and deferred payment plans, and refunds for withdrawal.

Out-of-state tuition will be charged to all Tennessee non-residents. However, both maintenance fees and out-of-state tuition are paid for students with assistantships.

Master's degree students pay a \$30 graduation fee, and PhD students pay \$75. There are no additional charges for diploma or binding. The graduation fee is non-refundable and is valid for three semesters after the semester in which it is paid. If you don't graduate on time, contact the graduate school (865-974-2475 or gradschool@utk.edu) for reapplication and utilization of the fee.

The payable amounts are charged according to the number of credit hours taken by the student, INTERNATIONAL STUDENTS are required to have a minimum of credits per semester due to the obligations of their visa. For more information about the obligations as an international student, reach the International Office at <https://international.utk.edu/>.

C. Health Insurance

For GRAs or GTAs that have at least a 25% appointment, UT provides insurance and the enrollment is automatic, dependent upon payroll processing. All the information about insurance policies, eligibility, requirements, and other, can be found at the Student Health Center (SHC) website: <https://studenthealth.utk.edu/graduate-assistants-associates-including-gagragta/>, which also includes the requirements for international students. In this website you can find flyers that explain the advantages and disadvantages of paying the fee for the SHC, such as having access to the SHC services with insurance paying 100% for most services, referrals to see providers outside SHC. The UT Medical Center offers student discounts on their medical services.

During the orientation, the Student Health Center will provide a brochure that explains insurance deductibles, co-pays, and other plan benefits and requirements. The brochure also provides information about purchasing coverage for your dependent(s) and about the availability of an optional limited dental insurance plan.

*Keep in mind that if you are enrolled in <9 credit hours, you can opt-in or opt-out on paying the fee to have access to the SHC services.

D. Professional Meetings and Travel Support

Graduate students are encouraged to attend at least one professional meeting during their degree program, and especially to present the results of their research. In general, attendance at professional meetings is at the student's expense. At some professional meetings, reduced registration, hotel rates, and other amenities are available for graduate students. In some cases, travel funds are available from the department (contact Dr. Bill Klingeman: wklinge@utk.edu) or individual faculty member's grants for students presenting papers at professional meetings once per year, ask your major professor about funding as travel support.

Graduate students requesting funds in support of travel should be prepared to provide the following statements & information:

- Justification for travel addressing the relationship of the meeting to the student's program with emphasis on how it enhances research efforts or the student's portfolio
- Potential benefits to Department of Plant Sciences, Herbert College of Agriculture & UTIA
- Evidence of application for funding from additional sources
- Letter of major advisor's support
- A detailed budget

Sources of possible funding include travel awards from professional associations that support graduate student efforts, the UT Graduate School, the professional development fund travel grants by the Graduate Student Senate and the Herbert College of Agriculture.

For forms & information about deadlines and application for the University Program and Services Fee funds, visit <https://gss.utk.edu/travel-awards/information/>. To receive notifications of deadlines by email, join the GradNews listserv by emailing your request to gss3@utk.edu

E. International Student Additional Requirements

To be eligible to pursue the graduate studies at the Department of Plant Science, international students are required to have a minimum of 80 points in the TOEFL exam in addition to the GRE examination. More information can be found at <https://gradschool.utk.edu/graduate-student-life/international-graduate-students/>.

F. International Office

The international students have to attend the Orientation at the International House (I-house) and more information will be provided during this orientation (<https://international.utk.edu/>).

G. General Responsibilities

1. Office hours

Graduate students on assistantships are generally expected to have office hours (8:00 a.m. to 5:00 p.m. Monday through Friday) established by the Institute of Agriculture, with exception for class attendance and pursuit of scholarly activities. However, the expectations of work must be discussed with the major professor. Students not employed by the University should make their schedule known to the major professor and be available for cooperative work on research projects. Holidays are established and published annually by University administration. Students observe the same holidays as other University personnel.

2. Holidays and Vacation

As part-time employees, students are not eligible for benefits such as accrual of annual vacation and sick leave. Graduate students should schedule anticipated absences with their major professor to ensure that this will not conflict with their research activities.

Students entering a graduate program should realize that there might be occasions when extended working hours will be required for completion of academic and research responsibilities. Research preparation and data collection may require extended hours during the week, some weekends, and occasional holidays during periods of greatest activity.

3. Leave of Absence

In the event of medical conditions, active military duty, and other emergencies, a student may request for a leave of absence (LOA) up to 2 years. A LOA form and the supporting documents must be approved by the Dean of the Graduate School and Department Head before submission to the Graduate School. A LOA must be applied before the last day of classes in the applying semester and is not official until receiving an approval from the Dean of the Graduate School.

A LOA may impact the financial status of a student such as graduate assistantship and loans. International students must contact The Center of International Education regarding the policy of LOA. Policies and forms of requesting LOA and reinstatement are available on the Graduate School website: <https://gradschool.utk.edu/forms-central/graduate-student-leave-of-absence/>.

H. Departmental Facilities and Resources

1. Vehicle Use

The GRA or GTA duties may involve driving vehicles, for the purpose of attending meetings, accomplishing research or performing service (giving talks, visiting growers, etc.). Students must have a valid U.S. driver's license in their possession while driving.

The department has several vehicles available for official use in the conduct of research, extension, and educational activities. Use of the vehicles must be scheduled through the departmental vehicle coordinator (currently Sandy Kitts), and departmental guidelines for vehicle use must be followed.

- Upon returning from a trip - remove all items including drink cans, lunch, food wrappers, equipment, supplies, etc.
- **You** are responsible for removing excess dirt, dust, and mud that is present after your use, whether inside or outside of vehicle
- If soil, pots, sand, or other debris is hauled in trucks, the driver must clean the truck bed before putting away the vehicle
- Vehicles are to be refueled and oil checked upon returning to campus whenever the fuel gauge reads one-half full or less.
- UT motor pool is open 7:00 a.m. - 11:30 p.m. Monday - Friday
- Reported problems, broken parts, strange noises, malfunctions, etc., **immediately** to the Administrative Supervisor (Sandy Kitts)

The University also maintains a motor pool for official travel. Vehicles from the motor pool must be scheduled in advance of the anticipated usage date, and a vehicle request form must be submitted prior to utilizing the vehicle.

In order to operate University owned vehicles, the operator must be an employee of the University and must have a valid U.S. driver's license. It is expected that the driver will obey all traffic laws and regulations. Violations are at the offender's expense and may result in disciplinary action by the department, including suspension of Department of Plant Sciences and University vehicle usage.

2. What to Do in a Vehicle-Related Emergency

If there is an injury - call 911. If an accident occurs, always get a police report. Usually, the Voyager card can be used for minor repairs when out of town. However, should an emergency occur where the "Voyager" card cannot be used you may call the UT Motor Pool at 865-974-2134: 6:30 am - 11:30 pm.

For emergencies from 11:00 p.m. to 7:00 a.m., you may call UT Safety and Security at 865-974-3114. This number will get a tow-in only. You may also call Chestnut Street Wrecker Service (Knoxville location) at 865-637-0103.

For further safety precautions call 911 and request that police come to where the vehicle is broken down.

3. RIGHT-TO-KNOW Program

Employees and students of the University of Tennessee must be protected from exposure to hazardous chemicals through a combination of safety training and safe practices in the workplace. A hazardous chemical is defined as any chemical that poses a physical hazard (fire, explosion, corrosion, reaction, etc.) or health hazard (toxin, irritant, carcinogen, mutagen, etc.) as defined in the OSHA Right-to-Know Law. Three laws govern the use of hazardous chemicals in University work places:

- The Right-to-Know Law applies to all uses of hazardous chemicals that are not on a laboratory scale. Areas covered by the Right-to-Know Law include shops and manufacturing facilities. All persons in the workplace must be trained regarding all hazardous chemicals in the workplace prior to assignment, and at least annually thereafter. A material safety data sheet (MSDS) must be on file for each hazardous chemical and all containers must be labeled. All necessary safety equipment must be provided and used. Refer to Sections 3 and 9 of the Institute of Agriculture Health and Safety Manual (<https://biosafety.utk.edu/biosafety-program/resources/manuals/>).
- The Laboratory Safety Standard applies to chemical manipulations carried out on a “laboratory scale” as defined in the OSHA regulations, which includes most University laboratories. A Chemical Hygiene Plan must be developed for each procedure, MSDS must be on file for all hazardous chemicals, all persons conducting the procedure must be trained to do the job properly and safely prior to performing the procedure, and all necessary safety equipment must be provided and used. Refer to Sections 3 and 9 of the Institute of Agriculture Health and Safety Manual.
- The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulates the use of all pesticides. The Institute of Agriculture Pesticide Management Policy specifies the training and pesticide use requirements that apply to all employees and students of the Institute of Agriculture. All pesticide use must be conducted by, or under the direct supervision of, a certified applicator. All necessary safety equipment must be provided and used. Refer to Section 40 of the Institute of Agriculture Health and Safety Manual.

For more information, contact the work supervisor, Department Head, or the Institute of Agriculture safety officer (865-974-1153).

I. Accident and Incident Reporting

All accidents and incidents must be reported immediately in accordance with University policies and procedures. Failure to report an accident may result in loss of Workers Compensation benefits. Failure to report unsafe conditions may result in future injuries and/or property damage. To report an accident, incident, or unsafe condition, contact the work supervisor, Department Head, or the Institute of Agriculture safety officer. Refer to the following sections of the Institute of Agriculture Health and Safety Manual: the accident reporting guidelines inside the front cover and Section 10.

J. Grounds for Withdrawing Financial Support

Failure to meet deadline dates in a degree program sequence may be grounds for loss of financial support. Students on work-related assistantships may be evaluated in writing by their faculty work supervisor at the middle and end of each semester. The student may be notified in writing of their work performance and may respond to this evaluation. The student may be placed on financial-support probation at the mid-point or end of any semester for poor work performance, poor academic performance, or excessive dropping of courses. If after 6 weeks, satisfactory work performance has not been achieved, financial support will be withdrawn.

K. Departmental Grievance Procedure

In the event that a graduate student has a grievance and the issue(s) cannot be resolved between the student and major professor, the student is urged to discuss the matter with his/her graduate student advisory committee. If the student is not satisfied with the decision of the committee, he/she can contact the Department Head to determine if further action is warranted. If the Department Head is unable to resolve the issue, he may appoint a special committee composed of two faculty members (not members of the student's academic committee), a student representative, and the Department Head, to conduct an impartial hearing. Further appeal may be made by the student as outlined in the guidelines established by the University and published in *Hilltopics*, see (<https://hilltopics.utk.edu/>) regarding "Graduate Student's Rights and Responsibilities."

Students and department faculty abide by these guidelines and those published in the Faculty Handbook in the section on "UTK Teaching-Learning Guidelines."

L. Other Sources for Resolution of Student Problems

1. Issues Related to Academic Coursework

Issues related to grades or academic coursework should first be addressed with the course instructor, then the appropriate Department Head, and finally the dean of the college in which the course is offered. If an appropriate solution cannot be reached through discussions with these individuals, the Associate Dean of Graduate Studies can offer assistance regarding the best "next steps" for problem resolution.

Issues related to academic advising should be addressed first with the advisor, then the director of the appropriate advising center, then the dean of the appropriate college.

2. Issues Related to Campus Life

Comments and concerns related to campus life, student organization, or student interests should be directed to the Dean of Students Office. Staff in this office will assist in resolving a concern or identifying the appropriate channel of appeal.

Students unsure how to initiate the problem resolution process may contact the Dean of Students (865-974-3179), the Associate Dean of Undergraduate Academic Affairs (865-974-3564), or the Associate Dean of Graduate Studies (865-974-3251) for assistance in determining the appropriate administrative channels of appeal.

Several offices provide support and guidance for students pursuing resolution of University-related problems. These roles of these staffs include: (1) exploring problems encountered by individual students, (2) informing students of appropriate administrative channels utilized for problem resolution, and (3) working to address broader issues and policies that impact all students.

Students are encouraged to visit any of the following offices, which are open from 8:00 a.m. - 5:00 p.m. Monday through Friday, to share concerns and ask for assistance:

- Associate Dean of Undergraduate Academic Affairs (401 Student Services, 865-974-3564). The Office of Undergraduate Academic Affairs is committed to supporting students and helping with the integration of student and academic life. This office provides support for students in the early undergraduate years and leadership opportunities for upper class students. The Associate Dean maintains effective working relationships with the undergraduate colleges and has a unique understanding of the academic problem students face.
- Associate Dean of Graduate Studies (218 Student Services, 865-974-3251). The Associate Dean of Graduate Studies is available to assist graduate students who are experiencing difficulties or want to express academic concerns related to their graduate programs.
- Dean of Students (413 Student Services Building, 865-974-3179). The Dean of Students Office sponsors and coordinates activities that focus on student growth and development outside of the classroom. This office advocates on behalf of all students, supplements existing channels of appeal, and helps students to resolve problems in a variety of areas.
- Office of Equity and Diversity (1840 Melrose Avenue, 865-974-2498). The Office of Equity and Diversity assists the University community in its goal to affirm diversity as an opportunity for personal growth and development. OED provides resources and services for the enhancement of diversity programs campus-wide. In addition, OED works with members of the University community who wish to file a complaint of discrimination or sexual harassment. All complaints receive private and immediate attention.
- Conflict Resolution Program (916 22nd Street, 865-974-4736). The Conflict Resolution Program provides mediation services whereby

people having conflict can work with a neutral third party to resolve their differences. The Conflict Resolution Program also offers seminars, internship opportunities, and consultation for individuals or groups. Services are available to students, faculty, and staff. They are voluntary and confidential.

- Dean, Herbert College of Agriculture (126 Morgan Hall, 865-974-7303).
- Office of Disability Services (191 Hoskins Library, 865-974-6087). If you need course adaptations or accommodations because of a documented disability or if you have emergency information to share, please contact the Office of Disability Services. This will ensure that you are properly registered for service.

M. Academic Honesty and Student Conduct

We expect our graduate and undergraduate students to exemplify the highest standards of personal conduct and academic honesty. The Academic Honor Statement for all UT Students follows:

“An essential feature of The University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity & academic honesty.”

“As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.”

Consequences of failure to adhere to these principles, including the appeals process, are detailed extensively in *Hilltopics: The Student Handbook*. For the most recent version of *Hilltopics*: <https://hilltopics.utk.edu/>

1. Alcoholic Beverage Policy

“Drinking or being under the influence of alcohol or illegal drugs while on the job” or “the use, possession, or distribution of alcohol on University property” is a violation of the University work rules and is so stated in the UT Personnel Policies and Procedures Manual. Violation of work rules may be cause for disciplinary action including possible termination of employment. As stated in the student handbook, *Hilltopics*, University regulations prohibit “all student organizations from serving or permitting the consumption, possession or display of any alcoholic beverage or containers at any time, or by anyone on University premises.” The “use, possession, or being under the influence of alcoholic beverages on University-owned or controlled property” is a violation of the Standards of Conduct as defined in *Hilltopics*.

2. Illegal Drug Policy

A statement of policy related to illegal drugs is contained in the UT Personnel Policies and Procedures Manual and is published each year in the *Hilltopics: Student Handbook*. The “Drug-Free Campus and Workplace” Policy (No. 720) states: “It is the policy of The University of Tennessee to maintain a safe and healthful environment for its students and employees.” Therefore, University policy prohibits the unlawful use, manufacture, possession, distribution, or dispensing of drugs (“controlled substances” as defined in the Controlled Substances Act, 21 U.S.C. 812) and alcohol on University property or during University activities.

Violation of this policy is grounds for disciplinary action—up to and including immediate discharge for an employee and permanent dismissal for a student. Federal and state laws provide additional penalties for such unlawful activities, including fines and imprisonment" (21 U.S.C. 841 et seq.; T.C.A. 39-6-401 et seq.). Local ordinances also provide various penalties for drug and alcohol-related offenses. The University is bound to take all appropriate actions against violators, which may include referral for legal prosecution or requiring the individual to participate satisfactorily in an approved drug use/alcohol abuse assistance or rehabilitation program.

Individuals who are paid by The University of Tennessee from federal grants or contracts must notify the University of any criminal drug statute conviction for a violation occurring in the workplace within five days after such conviction. The University is, in turn, required to inform the granting or contracting agency of such violation within ten days of the University’s receipt of notification.

Employees and their families needing treatment information should call their local Human Resources Office, Employee Assistance Program, or the State of Tennessee Employee Assistance Program (800-468-8369). Students needing treatment information should contact their campus Student Affairs Office, student health center, or counseling center.

The following acts are violations of the Standards of Conduct as defined in the student handbook, *Hilltopics*: “Unlawful use, manufacture, possession, distribution or dispensing of drugs or alcohol on University-owned or controlled property or during University activities.” A violation of the Standards of Conduct may result in permanent dismissal from the University.

N. Ag Campus & University Facilities & Resources

1. UT VolCard

Every student will be required to have a VolCard. It allows students to have access to the facilities at the University and it also functions as debit card for financial transactions. Some non-university stores accepts the VolCard as a payment method. Visit <https://volcard.utk.edu/> for information on how to obtain your VolCard at UT.

2. Parking

Graduate Students are required to purchase a hangtag permit to park at UTIA. Students are eligible to purchase Commuter permits which grant access to all “C” lots on campus. The closest “C” lots to UTIA are “C4” and “CF”. Visit <https://parking.utk.edu/> for more information.

3. Bus Service

Graduate and Undergraduate students may ride UT’s bus transportation for free. More information can be found at <https://ridethet.utk.edu/> for schedules and routes.

4. Library Facilities

Students are encouraged to use the services of the library and the librarians to guide your research. The Pendergrass Agriculture and Veterinary Medicine Library (<http://www.lib.utk.edu/agvet/>) is located across the street from Ellington Hall. Additional reference material is available in Hodges Library on main campus (<http://www.lib.utk.edu/>).

5. Software/IT Services

UT Students and Plant Sciences graduate students have access to a wide range of computer software and support. For complete information about these resources, visit the Office of Information Technology webpage. Visit <https://oit.utk.edu/> for more information.

6. Statistical Consulting

Plant Sciences Graduate students are encouraged to utilize the Statistical Consulting Center services to enhance the quality of their research.

For most UT students, the Technology Fee covers the cost of Statistical Consulting services for up to 10 hours per semester. Beyond that, the fee provides a subsidized rate of \$20 per hour. For more information about the scheduling appointments visit <https://oit.utk.edu/research/>.

7. Thesis Writing

Workshops about such as writing and teaching are offers through the Graduate School. Visit <https://gradschool.utk.edu/> and search for “workshops” for more information, availabilities and topics.

8. Writing Center

To help in your writing process, one-to-one meetings can be scheduled through the writing center. Visit <https://writingcenter.utk.edu/general-services/> for more information.

9. Housing

Housing for graduate students is available off-campus. Several websites can provide this information. Most of the graduate students look for affordable places to live in South, North or West Knoxville. The Fort is a neighborhood close to campus that have several housing options.

10. Keys

Graduate students are assigned keys for Plant Science Buildings, laboratories and greenhouses they will be working in. To obtain keys, please fill out key request forms with Sandy Kitts in PS. Keys will be cut, and students will have to pick them up personally. Your key is non-transferable and must remain with you at all times.

11. Campus Police

The University of Tennessee police officers are duly commissioned State of Tennessee, Knox County and Knoxville City police officers. As such, UT Police officers have full police powers in the City of Knoxville, Knox County and on any other property contiguous to property of The University of Tennessee.

The University of Tennessee Police Department provides basic police services to Tennessee's largest university. The department's main objective is to provide a safe campus for students, staff, faculty and visitors. UT Police officers perform a variety of tasks, which include: investigation of criminal activity, apprehension of criminals, accident and fire response, traffic enforcement, money transports and security for special events. The UT Police Department also offers posters, brochures, and seminars on a variety of topics; property engraving; statistical information; and many other services through the UT Crime Prevention Program. The UT Police Department reports to the Senior Associate Vice Chancellor for Finance and Administration.

UT Police Department
1101 Cumberland Avenue
Knoxville, Tennessee 37996
Telephone: 865-974-3114 (*non-emergency*) or 865-974-6631
Emergency: 911
Web Page: www.utpolice.org

O. Required Training Certifications

1. Information Security Awareness Training (required)

Training is required annually. This training site is available for faculty, staff, and graduate students and is to be completed in the first semester. Online training is available <https://oit.utk.edu/security/tools/awareness/>.

2. Laboratory Chemical Safety Training (Required)

This training is required annually. There are two options for this training. Login to <http://extol.tennessee.edu/safetyinitial/> or <https://ehs.utk.edu/index.php/training/#canvas>. If you are a staff employee working towards a degree, go through K@TE (online) to take the training. If you are a graduate student with or without an assistantship, go through Canvas (online) to take the training. This training is to be completed during the first semester.

3. Responsible Conduct of Research (ethics) Training (Required)

More information about the ethics training can be found in the MS and PhD sections on pages 10 and 21, respectively.

4. Title IX Training (Required)

If you are a staff employee working towards a degree, go through K@TE (online) to take the training. TITLE IX training will be under the subject 'Compliance'.

If you are a graduate student with or without an assistantship, go to the following website - <https://titleix.utk.edu/graduate-student-online-training/>. Please complete the training during your first semester.

P. Additional Training Certification

1. Child Protection Training for Covered Adults

For students, faculty, or staff who work with minors (person under 18 years of age), go to the following website: <https://hr.tennessee.edu/training/training-services/child-protection-training/>. If you are a staff employee working towards a degree, go through K@TE (online) to take the training.

If you are a graduate student with or without an assistantship, scroll down the page and click on the link for External Users. Please complete the training during your first semester.

2. Biosafety Level 2+ Training

For students that work in laboratories, especially those with access to hazardous materials. Talk to your major advisor if this training is required given the type of work you will perform. More information can be found at: <https://biosafety.utk.edu/>.

3. Institutional Animal Care and Use Committee (IACUC) Training

For students working with animals are required to take the IACUC training. More information can be found at: <http://iacuc.utk.edu/training/>.

4. Institutional Review Board (IRB) Training

For students working with human subjects (including surveys). With your major professor, make sure you are or not required to take the IRB training. More information about the training can be found at: <https://irb.utk.edu/>.

Appendix I – Roles of the Faculty Advisor and Graduate Student

Mentors, as defined by The Council of Graduate Schools, are:

Advisors, people with career experience willing to share their knowledge; supporters, people who give emotional and moral encouragement; tutors, people who give specific feedback on one's performance; masters, in the sense of employers to whom one is apprenticed sponsors, sources of information about, and aid in obtaining opportunities; models of identity, of the kind of person one should be to an academic (Zelditch 1990).

Good mentoring in all of its forms involves treating students respectfully and fairly, providing reliable guidance, and serving as a role model for upholding the highest ethical standards.

A. Role of the Faculty Advisor in Mentoring

(These guidelines were drafted by E. Bernard, K. Gwinn, and B. Ownley in 2012 as an EPP Best Practices document on the mentoring relationship between faculty and students. Much of the information presented here is also relevant to Plant Sciences.)

Faculty mentoring of graduate students should be provided in three broad areas:

1. Guiding Students Through Degree Requirements

- Ensuring that graduate students receive information about requirements and policies of the graduate program.
- Advising graduate students on developing a program plan, including appropriate course work, research or creative activity, and defining a timeline for their completion.
- Providing regular feedback on the progress of graduate students toward degree requirements. This should include advising them on their preparedness to take the qualifying exam, as well as any departmental “comprehensive” (“prelims”, “PhD entrance”, etc.) exam(s).
- Providing feedback and advice about the student’s performance in coursework, where appropriate.
- Providing for supervision and advising of graduate students when the faculty advisor is on leave or extended absence.

2. Guiding Students Through Thesis or Dissertation Research

- Advising graduate students on the selection of a thesis or dissertation topic that offers realistic prospects for successful completion within an appropriate time frame, and on the formation of the thesis or dissertation committee.
- Providing training and oversight in the design of research projects, in rigorous research methodologies, in theoretical and technical aspects of the thesis or dissertation research, and in professional integrity.

- Encouraging graduate students to stay abreast of the scholarly literature and of cutting-edge ideas in the field.
- Providing regular feedback on the progress of graduate students toward degree completion, including timely feedback on research, creative activities, and teaching, and constructive criticism if the student's progress does not meet expectations.
- Evaluating clearly and explicitly the strengths and weaknesses of the student's research.
- Encouraging an open exchange of ideas, including contemplation of the student's ideas if considered feasible by the mentor.
- Providing and discussing clear criteria for authorship of collaborative research.
- Assisting in finding sources to support dissertation research; such as, teaching assistantships, research assistantships, internal and external fellowships, etc.
- Being aware of the student's research needs and providing assistance in obtaining required resources.
- Encouraging and constructively criticizing oral and written communication.

3. Guiding Students Through Professional Development

- Guiding and/or supervising students' development as teachers, helping them find suitable employment as instructors on campus or elsewhere, visiting their classes, and providing constructive commentary and advice.
- Encouraging participation in professional meetings of regional groups as well as of learned societies.
- Facilitating interactions with other scholars, on campus and in the wider professional community.
- Helping graduate students develop into successful professionals and colleagues, including encouraging students to participate and disseminate results of research or creative activities in the appropriate scholarly or public forums.
- Facilitating career development, including advising graduate students on appropriate job and career options, as well as on the preparation of application materials for appropriate fellowships, scholarships, and other relevant opportunities.
- Assisting with applications for research funding, fellowship applications, field placements, and other applications as appropriate for the respective discipline.
- Being the student's advocate in academic and professional communities as appropriate in the professional judgment of the mentor.
- Providing career guidance and support, including assistance in preparation of a CV and job applications, writing letters of

recommendation in a timely manner, and helping the student prepare for interviews and other recruitment procedures.

- Providing guidance, if asked, about the intersection of concerns around physical and mental health, dealing with stress, or disability with the development of the student as a professional. This requires being cognizant of campus resources that address these issues.
- Helping graduate students to develop professional skills in writing reports, papers, and grant proposals, making professional presentations, establishing professional networks, interviewing, and evaluating manuscripts and papers.

4. Communicate With and Strive to Understand Each Student as a Unique Individual

- Mentors should recognize and seek to understand the various cultures of their students.
- Mentors should build trust and create a comfortable working environment, especially for members of underrepresented groups in the program.
- Graduate research assistants do not have automatically granted vacations or leave; they are required by their contract to work 20 hours/week on a 12-month appointment. Students should be aware of and adhere to the university calendar (i.e., weekdays not designated as holidays or official closings are workdays). All non-sick leave must be approved by the major professor before it takes place. A student should notify the major professor if they will be out for medical reasons.
- With respect to family responsibilities, mentors should be alert to students who need extra support when having a child, raising a child alone, returning to school after child-rearing, caring for an elderly parent, etc. If a student holds an appointment as a Graduate Student Researcher (GSR) and is unable to fulfill his or her duties, every effort should be made to modify the GSR's duties for the remainder of the semester. If family responsibilities (as adequately demonstrated by the student through appropriate documentation) prevent the GSR from performing any duties, it is strongly urged that the student continue to receive a stipend from the department, contract or grant (if allowed by the funding source) for the leave period.

B. Role of the Graduate Student Mentee

As partners in the mentoring relationship, graduate students also have responsibilities. In particular students should:

1. Be aware of their own mentoring needs and how these change through their graduate student tenure. Graduate students should discuss these changing needs with their mentors. If concerns arise about physical or mental health, dealing with

stress, or disability, these may be brought to the attention of the mentor for advice on campus resources. Students should not expect mentors to deal with longstanding health issues or major emotional events that are more properly the province of professional counselors, physicians, and psychotherapists.

2. Recognize that one faculty member may not be able to satisfy all of a student's mentoring needs. Seek assistance from multiple individuals/organizations to fulfill the mentoring roles described above.
3. Recognize that their mentoring needs must respect their mentor's other responsibilities and time commitments.
4. Become aware of—and meet—the deadlines associated with the degree program.
5. Maintain and seek regular communication with their mentors, especially the major professor.
6. See to it, in cooperation with the Head and the Graduate Director in the program, that all parties are informed if a change of advisor is contemplated. If specific research plans have been agreed with one advisor, see these through if possible before changing to another advisor.

C. Advisor/Student Guidelines

Both mentors/advisors and students should be aware of some general common-sense guidelines, as follows:

1. Entering a mentoring relationship is voluntary. Mentors and students should discuss their expectations of the mentoring relationship upon entering it.
2. Either party has the right to withdraw from the mentoring “contract” if, despite genuine attempts to make it work, the relationship is not satisfactory. The department head must be included in this discussion. Portability of assistantships should be discussed.
3. While often the mentor will have more experience on aspects of work, the relationship should be one of partners who jointly make decisions, with consideration of the budget and time limitations of the specific project.
4. Meetings should be held in a quiet environment (or environments, for telephone meetings) where both parties feel they can speak freely without being overheard.
5. Meetings should be long enough and paced so as to allow the two people to get to know and feel comfortable with each other.
6. Information shared in mentoring meetings is subject to standard rules of professional confidence (see below).
7. Commitments made should be honored. If meetings are canceled or delayed, adequate warning of non-availability or delay should be given. A postponed meeting should be re-booked promptly.
8. Either party has the right to ask for a review of how the mentoring is progressing, or for agreements or plans made at an earlier stage to be reviewed.
9. If either party feels unclear about the current status of the mentoring, that party should seek to clarify the views and wishes of the other party.
10. Mentors should recognize their limitations and avoid working with the student in ways that exceed those limitations.

11. Should either party sense there is a conflict of interest between the mentoring and any other role, this should be made known to the other as soon as is practicable.

Specific items relating to the University of Tennessee, Herbert College, and Plant Sciences and their requirements and expectations:

- The relationship between the mentor and student should at all times be congenial, professional, and respectful. Both parties bear responsibility for a healthy relationship. The list below applies primarily to the relationship of the student to other university personnel.
- Problems and conflicts are best resolved if they are discussed when they first appear. Both mentor and student are expected to listen carefully to what the other has to say. The university, Herbert College, and the department have formal, well-defined avenues to take if conflict cannot be resolved, and a student can always speak informally about problems with any trusted faculty member or ask a faculty member to serve as an advocate.
- If a problem is not resolved by mentor-student discussion, the following hierarchy of appeal should be followed:
 1. Meeting of the student's graduate advisory committee
 2. Director of Graduate Studies (DGS)
 3. Department Head (DH) – The DH and DGS may appoint an ad hoc committee to review the situation and recommend solutions. The major advisor and/or student can also request such a committee
 4. Dean of Herbert College

All persons within the department, college, and university are deserving of respect and civil discourse. Unprofessional or hostile behavior or grossly intemperate language toward anyone including faculty, technical staff, clerical staff or other students will not be tolerated and may be grounds for discipline.

In the case of conflict, a student should not denigrate or cast aspersions on the professional reputation of the mentor, the mentor's lab and personnel, or the department in any manner including verbal, written, electronic, or Internet-based.

Hurtful gossip, rumor-mongering, and attacks via social media are not only harmful to the target, they ultimately can cause severe damage to the reputation of the originator. Serious violations may result in dismissal from the program.

Students are expected to follow the directions, advice, and counsel of the mentor and the graduate committee on matters relating to university activities, including research expectations, agreed-upon work hours, laboratory practices, established deadlines and field work. All university regulations regarding best lab practices must be followed.

These Role and Responsibility principles are adapted from guidelines published by several other universities and organizations, and also Plant Sciences departmental policies:

Best Practices for Faculty Mentoring of Graduate Students, University of California, Berkeley. <http://grad.berkeley.edu/policies/guides/appendix-11-best-practices-for-faculty-mentoring-of-graduate-students-approved-by-the-graduate-council-march-6-2006/>.

Mentoring Guidelines, Graduate Council, University of California, Davis, <http://gradstudies.ucdavis.edu/gradcouncil/mentoring.pdf>.

Advisor, Teacher, Role Model, Friend, National Academy of Sciences, National Academy of Engineering, Institute of Medicine, <http://www.nap.edu/readingroom/books/mentor/>.

Guideline for Faculty Mentors, University of California, San Francisco, <http://statusofwomen.ucsf.edu/resources/studentresources.php>.

The Council of Graduate Schools. <http://cgsnet.org>.

Zelditch, M. (1990). Mentor Roles, Proceedings of the 32nd Annual Meeting of the Western Association of Graduate Schools. Cited in Powell, R. C. and Pivo, G. (2001), *Mentoring: The Faculty-Graduate Student Relationship*. Tucson, AZ: University of Arizona.

Appendix II – Graduate Student Checklists

A. Master of Science

<u>Milestone</u>	<u>Responsible person</u>	<u>Suggested timeline</u>	<u>Date completed</u>
Complete: UT Chemical Safety Training*	Student	1st semester	_____
Computer Awareness Training*	Student	1st semester	_____
Title IX Mandat. Reporter Training*	Student	1st semester	_____
CITI RCR Training*	Student	3 rd semester	_____
Form graduate advisory committee (GAC)	Student & Advisor	2nd semester	_____
Coursework & study plan	Student & Advisor	2nd semester	_____
1st GAC meeting	Student	2nd semester	_____
Meet with Pendergrass Librarian to plan for research literature search	Student	End of 2nd semester	_____
2nd GAC meeting	Student	4th semester	_____
Progress review	Student & Advisor	Each December	_____
GAC approval of written MS thesis proposal	Student	No later than 3rd semester	_____
Submit “Admission to Candidacy” form	Student	(3rd or) 4th semester	_____
Submit MS Graduation Application to Graduate School	Student	3rd semester	_____
Schedule thesis defense with GAC	Student	4th semester, check deadlines	_____
Submit thesis to GAC and to the Thesis Consultant (thesis@utk.edu) for preliminary review	Student	2 weeks before defense	_____
Reserve room for defense	Student	Right after defense schedule is confirmed	_____
Announce the defense to public	Student	At least one week before defense	_____
Final thesis/dissertation defense	Student	Check deadlines	_____
Notify graduate school the outcome of defense (“Report of Defense of Thesis” form)	Student & Advisor	After defense	_____
Submit final thesis and “Thesis Approval Form”	Student	After revisions & GAC approval	_____
Submit all research notebooks, data & electronic files to advisor	Student	Post thesis/dissertation submission; evaluate embargo option	_____
Complete checkout list & exit interview with Department Head	Student		_____

*Online training via **CITI Online**, **K@TE** (kate.tennessee.edu), or **Canvas**

B. Doctor of Philosophy

<u>Milestone</u>	<u>Responsible person</u>	<u>Suggested timeline</u>	<u>Date completed</u>
Complete: UT Chemical Safety Training*	Student	1st semester	_____
Computer Awareness Training*	Student	1st semester	_____
Title IX Mandat. Reporter Training*	Student	1st semester	_____
CITI RCR Training*	Student	3 rd semester	_____
Form graduate advisory committee (GAC) and submit “PhD Committee” form	Student & Advisor	2nd semester	_____
Coursework & study plan	Student & Advisor	2nd semester	_____
1st GAC meeting	Student	2nd semester	_____
Meet with Pendergrass Librarian to plan for research literature search	Student	End of 2nd semester	_____
2nd GAC meeting	Student	4th semester	_____
3rd GAC meeting	Student	6th semester	_____
Progress review	Student & Advisor	Each December	_____
GAC approval of written PhD dissertation proposal	Student	No later than 5th semester	_____
Comprehensive exam*	Student & Advisor	No later than 4th semester; ~after classes are taken	_____
Submit “Admission to Candidacy” form	Student	After passing comprehensive exams	_____
Submit PhD Graduation Application to Graduate School	Student	5th semester	_____
Schedule dissertation defense with GAC & graduate school	Student	6th semester, check deadlines	_____
Submit dissertation to GAC and to the Thesis Consultant (thesis@utk.edu) for preliminary review	Student	2 weeks before defense	_____
Reserve room for defense	Student	Right after defense schedule is confirmed	_____
Announce the defense to public	Student	At least one week before defense	_____
Final dissertation defense	Student	Check deadlines	_____
Notify graduate school the outcome of defense (“Report of Defense of Dissertation” form)	Student & Advisor	After defense	_____
Submit final dissertation and “Dissertation Approval Form”	Student	After revisions & GAC approval	_____
Submit all research notebooks, data & electronic files to advisor	Student	Post thesis/dissertation submission; evaluate embargo option	_____
Complete checkout list & exit interview with Department Head	Student		_____

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