Plant Pathology Graduate Student Manual

GENERAL INFORMATION

I. Overview and Goals

Students are expected to read this manual carefully and understand their obligations. Each student has the primary responsibility for meeting all requirements and deadlines for his/her degree program. The information presented in this departmental Graduate Student Manual is intended to supplement, but not supersede, the university's <u>Graduate Bulletin</u> and the <u>Graduate School Policies & Procedures</u>. Students should become familiar with the Graduate School regulations and policies contained in these online publications.

II. Degree Programs

The Department of Plant Pathology at the University of Georgia offers extraordinary opportunities to graduate students interested in plant pathology. The Department offers graduate programs leading to M.S. and Ph.D. degrees in plant pathology and a professional M.P.P.P.M. (Master of Plant Protection and Pest Management) degree. The M.S. and Ph.D. degrees are academic degree programs emphasizing the development of scientists who will be competitive for positions in the public and private sectors. The reward of this intensive period of scholastic activity is the potential of making significant contributions to science, agriculture, and industry. Specific requirements for the M.S. and Ph.D. degrees are outlined later in this manual. M.P.P.P.M. students should visit http://www.ent.uga.edu/mpppm.htm and consult with their academic advisor for more information regarding their program.

III. Student Obligations

Students are expected to arrange regular consultations with their Major Professor. The Graduate Coordinator is a resource to facilitate keeping the graduate program on schedule, but it is the student's responsibility to meet all requirements and deadlines to complete the degree in a timely manner. To aid in this process, the Department has developed a document with academic Milestones for the M.S. and Ph.D. programs (Appendix 1). Students are expected to familiarize themselves and follow these Milestones to facilitate smooth timely degree completion.

As University of Georgia employees, graduate students supported on either departmental assistantships or research grants are expected to be at work each day that the university is open for business. If an individual needs to be away from work on any day(s) other than <u>official university</u> <u>holidays</u>, the individual first must obtain permission from her or his major professor. In the case of illness or emergency situations that result in the absence of an individual from work, it is the individual's responsibility to inform his or her Major Professor of the absence(s) as soon as possible. However, graduate students are not required to enter annual or sick leave in the university's HR and Payroll System.

IV. Academic Honesty

Academic integrity is an adherence to a high standard of values regarding life and work in an academic community. Pursuit of knowledge and creation of an atmosphere conducive to learning are both definite aspects of academic integrity, but its basis lies in the standard of honesty. Specific regulations governing student academic conduct are described at

<u>http://grad.uga.edu/index.php/current-students/policies-procedures/academics/academic-</u> <u>honesty/</u> and should be consulted to avoid misunderstanding. Penalties for not adhering to the Academic Honesty policy are severe and can lead to dismissal.

Graduate students whose assistantship is funded through a Federal grant must complete Responsible Conduct of Research (RCR) training. Although this is not currently a requirement for students supported by other funding sources, completion of this training module is strongly encouraged for all Plant Pathology graduate students. The training can be accessed online via <u>UGA's Collaborative</u> <u>Institutional Training Initiative website</u>.

REGISTRATION

I. Procedure

Complete registration instructions are included in the <u>Athena online student registration</u> <u>system</u> and <u>The University of Georgia Schedule of Classes</u> for each semester. All currently enrolled students are strongly encouraged to preregister. The basic registration procedures are described in Athena, and important deadlines for each semester are listed. New students registering for the first time should obtain necessary registration information from the Major Professor and Graduate Coordinator. Schedule changes (Drop/Add) can only be made during the first week of classes (check Athena for the exact dates). The student must obtain the approval of the Major Professor so that changes are in accordance with the formal Program of Study.

II. Course Load Limitations

A graduate student using University facilities and/or staff time must register for a minimum of 3 hours of credit each semester. A plant pathology M.S. or Ph.D. student on an assistantship must register for a minimum of 18 credit hours for each semester (including the summer) they are on assistantship. The maximum course load for any graduate student is 18 credit hours.

III. Registration During Final Semester

The Graduate School requires that students must be registered during the semester in which they complete all degree requirements. The requirement is for at least 3 semester hours for students not on an assistantship and 18 hours for plant pathology M.S. and Ph.D. students on assistantships.

DEPARTMENTAL POLICIES AND GUIDELINES

I. Departmental Graduate Studies Committee

The Departmental Graduate Studies Committee is chaired by the Graduate Coordinator and comprised of six faculty members (including the Graduate Coordinator). Primary responsibilities are as follows: (1) to supervise and recommend changes in departmental policies affecting graduate programs, (2) to recruit students, (3) to act as an admissions committee, (4) to maintain appropriate records on current and past students, (5) to counsel students, (6) to act as a liaison with the Graduate School, (7) to act as a grievance committee for matters relating to the graduate program, and (8) to select the awardees of the K. E. Papa Outstanding Ph.D. Graduate Student and the Cedric Kuhn Outstanding M.S. Graduate Student Awards each year. Membership is rotated among the faculty with terms of three years. Normal relations of graduate students with the Department are carried on through the Major Professor and the Advisory Committee, but students may consult the Graduate Coordinator or the Graduate Studies Committee at any time. If those channels are not sufficient to address an issue that many arise, the student is directed to contact the Department Head.

II. Major Professor and Advisory Committee

The advisory committee for M.S. students will consist of the Major Professor and at least two other faculty members and should be appointed during the first or second semester of residence. For Ph.D. students this committee will consist of the Major Professor and three or more other faculty members who must be appointed during the first or second semester. If a student has two Co-Major Professors, they will be counted the same as one major professor on the committee. At least two members of the Ph.D. committee must be regular (i.e., non-adjunct or -courtesy) faculty members in the Department of Plant Pathology. Some students may do all or part of their thesis/dissertation research at the Griffin or Tifton campuses. To make the transition as smooth as possible, the student may have co-major professors at two different locations or a member of the advisory committee may be assigned to counsel the student while at a location away from the Major Professor.

M.S. and Ph.D. students may have one advisory committee member outside of the University of Georgia serve on the advisory committee with Graduate School approval. To request approval, the student's Major Professor will send a justification letter and CV for the proposed outside advisory committee member to the Graduate Coordinator. The justification letter will outline the expertise the proposed outside committed member will provide and will be signed by the major Professor and the Graduate Coordinator. The Graduate Coordinator will submit both documents to the Graduate School via Grad Status for Graduate School approval.

The student and Major Professor may want to consider developing a written <u>mentorship agreement</u> outlining mutually agreed upon goals and expectations that can serve as the foundation for the mentor-mentee relationship. While mentors and mentees may find mentorship agreements to be useful, they are optional.

III. Academic Background (deficiencies and prerequisites)

A student who satisfies all basic requirements, but whose background in pertinent biological or plant

sciences is inadequate, must enroll for selected undergraduate courses to address deficiencies. A common deficiency is an introductory plant pathology course with a laboratory, and incoming students must enroll in PATH 3530/3530L if they cannot show that they have had the equivalent (no graduate credit is given for this course, and it cannot be listed on the Program of Study).

IV. Programs of Study for the M.S. and Ph.D. Degrees

A **preliminary program of study** (PPOS) is required for M.S. and Ph.D. students. The PPOS Excel form can be obtained from the graduate coordinator. The PPOS will be developed by the major professor and the student and approved by a majority of the advisory committee. The PPOS will be submitted to the graduate coordinator by the end of the student's first year of residence for review. The student will use the approved PPOS to submit the **formal program of study** to the Graduate school via the appropriate online form in Grad Status. The department Milestones (Appendix 1) require each M.S. and Ph.D. student to submit a formal Program of Study to the Graduate School by the end of the student's first year of residence. The formal Program of Study must be approved by the Graduate Coordinator and the Dean of the Graduate School.

The M.S. Program of Study must include: 1) 3 hours of PATH 7000 (thesis research), 2) 3 hours of PATH 7300 (thesis writing), (3) a total of not less than 24 semester hours of graduate courses, excluding thesis research (PATH 7000) and thesis writing (PATH 7300), (4) at least 12 of which must be in courses open only to graduate students, although classes open to both undergraduate and graduate students which have only graduate students registered can also count. Credits from courses such as GRSC 7770, GRSC 9270, and ELAN 7768/7769 do not count toward the 24-hour minimum. At least half of the 24 hours of formal course work must be in graduate courses in Plant Pathology. A grade point average of 3.0 must be maintained on all graduate courses taken, and no grade below 2.0 will be accepted as part of a Program of Study.

The Ph.D. program of study should consist of 16 or more hours of 8000-level courses in addition to research, dissertation writing, and directed study. This program must include all course work to be applied to the degree and must include 3 hours of PATH 9000 (dissertation research) and 3 hours of PATH 9300 (dissertation writing). The specific number of hours required for the Ph.D. degree is determined by the student's advisory committee; however, the Graduate School expects a minimum of 30 hours of course work, that must include three hours of dissertation writing (PATH 9300) and dissertation research (PATH 9000). At least 12 hours of course work in Plant Pathology is required. Credits from courses such as GRSC 7770, GRSC 9270, and ELAN 7768/7769 do not count toward the 30-hour minimum. The student must maintain an average of 3.0 or higher on all graduate courses taken. No grade below 2.0 is acceptable for courses on the Program of Study.

V. Specific required courses

The following courses are required for all Plant Pathology M.S. and Ph.D. students (in addition to the PATH 7000, 9000, 7300, and 9300 minima mentioned above):

- PATH 8000: 2 credit hours in PATH 8000 (Field Plant Pathology) must be completed (1 credit for summer semester and 1 credit for fall semester-not necessarily within the same year). No more than 2 hours of PATH 8000 may be completed for credit during a student's tenure at UGA, whether completing a M.S. or Ph.D. or both.
- PATH 8150: M.S. and Ph.D. students are required to complete 1 hour of PATH 8150 (Plant Pathology Graduate Seminar). Students will register for this course during the final semester of the program when defending the thesis/dissertation. Plant Pathology M.S. and Ph.D. students are required to attend each departmental seminar, even if they are not registered for PATH 8150 in that semester
- PATH 8170 (Plant Pathology Graduate Colloquium): Students must register for this course every semester during their first two (M.S.) or three (Ph.D.) years, and give one presentation per academic year unless presenting in departmental seminar (PATH 8150) during the same academic year. Maximum credit that can be applied in the Program of Study: 2 and 3 credits for M.S. and Ph.D. students, respectively.
- GSRC 7770: All students must complete GRSC 7770 (Graduate Teaching Seminar) prior to or concurrently with their first teaching assignment. See "Teaching Experience" section below for more information.
- PATH 8160: Each student must register for 1 credit hour of PATH 8160 (Special Topics in Plant Pathology) each semester he or she serves as a teaching assistant.

VI. Desired Learning Outcomes

In developing the Program of Study, the objective is to achieve the following learning outcomes.

LO 1: Has a good (M.S.) or comprehensive (Ph.D.) understanding of the discipline of plant pathology

LO 2: Has a thorough (M.S.) or exhaustive (Ph.D.) knowledge pertaining to their thesis topic, and can propose creative solutions for problems related to their research

LO 3: Can design, conduct and analyze experiments using appropriate methods to achieve specific research objectives

LO 4: Can effectively communicate verbally with peers and the public in both formal and informal settings

LO 5: Can effectively communicate with peers and the public by writing and disseminating their ideas, results and/or recommendations

VII. Suggested Core Curriculum

The following is a Suggested Core curriculum for the M.S. and Ph.D. programs in Plant Pathology. The purpose of this section is to assist graduate students and advising faculty in planning a student's program of study. The sections listed below in the Suggested Core are intended to provide each student a well-rounded academic program. In addition to this suggested core, students are encouraged to design a program of study with courses from other departments that specifically aid them in their particular interests. Some of the most pertinent departments for course offerings would likely be: Biochemistry and Molecular Biology; Bioinformatics; Cellular Biology; Crop and Soil Sciences; Ecology; Entomology; Genetics; Horticulture; Microbiology; Plant Biology; and Statistics. For

a complete listing of the graduate level courses taught in the Department of Plant Pathology click <u>here</u>.

Suggested Core

• Area A - (3 or more hours) Disease Diagnosis and Management. PATH 6280-6280L Diagnosis and Management PATH 8410 Advanced Plant Disease Management • Area B - (1 or more hours) Practical Plant Pathology. PATH 8000 Field Plant Pathology (2 credit hours required) PATH 8300 Clinical Plant Pathology PATH 8180 Professionalism and Career Development in Plant Pathology Area C - (6 or more hours) Organismal Plant Pathology. PATH 6200-6200L Mycology PATH 8240-8240L Plant Nematology PATH 8290-8290L Plant Bacteriology PATH 8350 Plant Virology Area D - (3 or more hours) Concepts and Skills in Plant Pathology. PATH 8400 Host Pathogen Interactions PATH 8310-8310L Epidemiology PATH 8330 Population Genetics of Plant-Associated Microbes

PATH 8960 Genetics of Yeast & Filamentous Fungi

PATH 8910- Genetics of Host Plant Resistance to Disease

VIII. Yearly Progress Reports

Annually at the end of Fall Semester, each student is expected to provide an updated report of their progress to the Department Head. The format of the requested information will be provided to the student by the Department Head. Progress reports from all students in the department are reviewed by the faculty to track students' progress in completing their degree program in a timely manner, and to determine to what extent the learning objectives identified by the department are met.

IX. Transition from M.S. to Ph.D. degree

Students without an M.S. degree may be admitted directly into the Ph.D. program in Plant Pathology.

The departmental Graduate Studies Committee will evaluate such applications based on:

- compelling evidence of relevant education and research experience, including hypothesis testing, data collection, data analysis, and outstanding performance in pertinent course work;
- strong evidence of excellent scientific writing skills e.g. BSc thesis, co-authorship on publications from undergraduate research activities;
- strong letters of recommendation directly addressing the likelihood of success in a Ph.D. program in Plant Pathology;
- outstanding academic performance as reflected on transcripts and in GRE scores.

Applicants who are denied admission directly into the Ph.D. program may be automatically considered for the M.S. program and encouraged to transition to the Ph.D. program at a later date.

In some instances, it is possible for a student admitted into the M.S. degree to work directly toward a Ph.D. degree. Students applying to transition from the M.S. to Ph. D. programs must submit a written request for this transition to the graduate coordinator. This request must be supported by the student's major professor. The student must first be accepted in the M.S. program and have completed at least one, but not more than three, academic semester(s) of graduate work (not counting summer semesters). Transfer to the Ph.D. must be completed by the end of the fourth semester of study.

The following criteria must also be met:

1) A minimum graduate GPA in the Plant Pathology program of 3.3 (corresponding to a B+ average).

2) The student's doctoral research proposal must be completed and submitted to his or her advisory committee and the departmental Graduate Studies Committee. The doctoral proposal must also be presented in a formal departmental seminar.

3) The written doctoral proposal and proposal seminar must be approved by both the student's advisory committee and the departmental Graduate Studies Committee by a positive majority vote. The proposal must be submitted to the student's advisory committee and the departmental Graduate Studies Committee at least two weeks prior to the scheduled transition seminar. The proposal must not exceed 15 single-spaced or 30 double-spaced pages (without references) Criteria to be considered are the student's understanding of his or her doctoral research project in the broader context of the existing literature, the proposed methodology and potential alternative approaches and pitfalls, description of how M.S. thesis objectives are elevated to Ph.D. dissertation objectives and the degree to which she/he has contributed her/his own ideas to the conception and/or execution of the project.

All program of study requirements specific for doctoral students who hold the M.S. degree must also be met by students who proceed directly into the Ph.D. program. It is the responsibility of the Major Professor to identify funding for the student beyond the M.S. program.

X. Seminars

Plant Pathology M.S. and Ph.D. students are required to attend each departmental seminar, even if they are not registered for PATH 8150 in that semester. Students must be registered for Graduate Seminar (PATH 8150) during the final semester of the program when defending the thesis/dissertation. Specific procedures and guidelines for seminar can be obtained from the seminar chair. This seminar can be scheduled outside the regular seminar series if necessary but, if possible, should be presented on the same day as the final oral examination/defense.

XI. Graduate Assistantships and Teaching Experience

Graduate students provided with assistantships are expected to conduct research and provide teaching assistance. Graduate assistantships are <0.50 EFT, i.e. students are not considered full-time employees and do not accrue annual leave. The normal length of departmental assistantship support is 2 and 3 years for M.S. and Ph.D. programs, respectively, but support may continue for longer

periods with grant funds. With proper justification, longer periods of departmental support may be requested by the Major Professor and the advisory committee.

Research assignments for Graduate Research Assistants are made by the student's major professor and advisory committee. Portions of this research required for the assistantship may be used in partial fulfillment for the requirements for a degree. Assistantships may be terminated for unsatisfactory performance such as low grades or lack of commitment to research and teaching responsibilities.

All Plant Pathology M.S. and Ph.D. students are expected to be a teaching assistant in an assigned course for at least one semester for M.S. students and two semesters for Ph.D. students during a degree program. Students provided department-funded assistantships are expected to serve as Teaching Assistants annually for up to 3 times over the course of 2 years for M.S. students and up to 5 times in 4 years for Ph.D. students. The student will register for 1 credit hour of PATH 8160 (Special Topics in Plant Pathology) each semester he or she serves as a teaching assistant. Each student must complete GRSC 7770 (Graduate Teaching Seminar) prior to or concurrently with their first teaching assignment.

The Graduate Coordinator, in consultation with the Department Head, is responsible for assigning Teaching Assistants to particular courses and professors, and is responsible for balancing the amount of service provided with the amount budgeted. The instructor of record of the course is responsible for evaluating the performance of each teaching assistant. Examples of assistance provided by TAs include: (1) preparation of lab materials, (2) set-up and take down of laboratory apparatus and materials; (3) teach laboratory sections; (4) conduct question-answer sessions with students; (5) give one or more lectures; (6) monitor and grade examinations. Students specifically interested in enhancing their teaching skills should explore, in consultation with their major professor and advisory committee, Graduate School resources such as the <u>Teaching Portfolio Program</u> or the <u>Interdisciplinary</u> <u>Certificate in University Teaching</u> as they are developing their Program of Study.

XII. Major Academic Examinations

The following major academic exams/defenses are given in the Department: 1) the M.S. final oral exam/thesis defense, 2) the Ph.D. comprehensive (qualifying) exam, 3) the Ph.D. dissertation defense; and 4) the M.P.P.P.M, final exam. These exams are administered by each student's advisory committee. Guidelines for these exams/defenses are as follows.

1. M.S. oral exam/thesis defense.

This exam/defense focuses primarily on aspects of a student's thesis. However, it also should explore a student's overall knowledge of the subject matter covered in her/his program of study. All members of the advisory committee must be present for the entire exam. For successful completion of the exam/defense there can be no more than one negative vote. The major professor's/co-major professor's vote of approval is required for the student to pass the examination. If two or more negative votes are received, the exam/defense may be administered a second time. The time of the second exam/defense is established by the advisory committee. Failure to pass the second exam/thesis defense will result in dismissal from the M.S. program.

2. Ph.D. comprehensive (qualifying) exam.

Each Ph.D. student must pass a formal, comprehensive written and oral qualifying examination before being admitted to candidacy. This examination is administered by the student's advisory committee.

- The written portion of the exam is given after a student has completed the bulk of his/her course work and consists of questions submitted to a student's major professor by members of the advisory committee. Each committee member will submit one or more questions that can be answered in an eight-hour block of time. Depending upon the committee member's wish, her/his portion of the exam may be either closed or open book. The Major Professor is responsible for administrating the exam over a fiveday period of time. The Major Professor will collect the student's answers to each portion of the exam and give them to the appropriate committee member for grading which shall be done on a Pass/Fail basis. A student may fail one portion of the exam and still proceed to the oral portion of the exam. If two or more portions of the written exam are failed, a student may be given one additional opportunity to retake the failed portions of the exam. The committee members involved will be asked to submit new questions for the exam. Any retesting must be completed within one month of the date of the original exam. Failure to pass more than one portion of the second examination will result in dismissal from the Ph.D. program.
- The oral portion of the Ph.D. comprehensive (qualifying) exam is open to all members of the faculty and shall be announced by the Graduate School. The Graduate Coordinator must notify the Graduate School in writing of the time and place of the exam at least two weeks before the date of the exam. During this exam a student must demonstrate significant depth of understanding of both subject matter within the department as well as methodologies and literature relating to the dissertation research project. A careful examination of a student's dissertation prospectus (written proposal) may precede or follow the oral exam but may not take the place of the oral portion of the exam. All members of the advisory committee must be present for the entire duration of the oral exam. A student may advance to candidacy with one negative vote by a member of the advisory committee. The major professor's/comajor professor's vote of approval is required for the student to pass the examination. If there are two or more negative votes a student may be allowed to repeat the entire oral exam one time. The date of the second exam is determined by the advisory committee but must be within one month of the date of the original oral exam. Failure to pass the second examination will result in dismissal from the Ph.D. program.
- 3. **Ph.D. Dissertation Defense.** Ideally, the dissertation defense for a Ph.D. student should be held the same day as student's defense (exit) seminar. If this is not possible, then the defense should be held within one month of the defense seminar. Exceptions to this rule may be made

by a student's advisory committee. The date of the defense must be reported to the Graduate School by the Graduate Coordinator at least two weeks prior to the exam. The dissertation can be approved with one negative vote. The major professor/co-major professor's vote of approval is required for the student to pass the examination. If there are two or more negatives votes, a student may repeat the defense a second time. The date of the second defense is determined by the advisory committee. Failure to pass the second defense will result in dismissal from the Ph.D. program.

XIII. Thesis or dissertation

Each student working toward a research degree must submit a thesis or dissertation research proposal (prospectus) for the research to the Major Professor and advisory committee. An M.S. student should submit a proposal during the second or third semester as a graduate student at the University, and a Ph.D. student should submit a proposal during the fourth semester. The proposal will include (1) rationale for undertaking work, (2) literature review, (3) objectives, (4) procedures, and (5) literature cited. It will be the responsibility of the student's advisory committee to help the student plan the proposal as well as to evaluate it after it is completed. The purpose of the proposal is to provide a specific outline to guide the student in the research. However, as the student progresses with the research, it may be necessary to change the direction of the proposal; the student should feel free to make any changes that will improve the research and that are acceptable to the advisory committee. The dissertation research proposal must be approved before a prospective doctoral candidate can be admitted to candidacy.

Candidates for an M.S. or Ph.D. degree must submit the thesis or dissertation to the Major Professor for approval and recommendations. Thereafter, a near final form of the thesis or dissertation will be prepared and submitted to the advisory committee at least two weeks prior to the final oral exam. The final draft may be prepared after the examination. The thesis is a requirement for the M.S. degree. The dissertation is the final component of a series of academic experiences which culminate in the awarding of the Ph.D. degree. The thesis or dissertation fulfills four major functions: (1) it presents original research or scholarship, (2) it demonstrates the student's ability to understand and critically evaluate the literature of the field, (3) it reflects the student's mastery of appropriate research methods and tools, and (4) it shows that the student can address a major problem, arrive at successful conclusions, and report the results in a written document. The findings of a thesis or dissertation should be worthy of publication in a refereed journal or other scholarly medium.

A Dissertation Defense Announcement form must be submitted to the Graduate School for all Ph.D. students. The student will send the defense announcement information (date/time/location of the defense and the dissertation title) to the Graduate Coordinator at least two weeks before the defense date. The Graduate Coordinator will submit the Dissertation Defense Announcement form to the Graduate School via Grad Status.

XIV. General Requirements

The dissertation or thesis may be written in either the traditional or the manuscript styles described

below. In both styles, there must be an introduction and a literature review with the purposes of: defining problems, presenting hypotheses or theories, stating objectives, and thoroughly reviewing pertinent literature. In both styles, there must be a concluding chapter or section which unites the preceding chapters or sections and which may consist of a general discussion integrating the major findings. In the manuscript style, the introduction, literature review, and concluding chapter or section will be presented separately from their briefer presentation in each manuscript to allow thoroughness not usually permitted by space limitations in scientific journals.

XV. Acceptable Styles for the Thesis/Dissertation

Visit the <u>Electronic Thesis and Dissertation website</u> for answers to frequently asked questions about the mechanics of formatting, converting, and submitting electronic theses and dissertation.

1. The Traditional Style:

The traditional style, in addition to an introduction and literature review, may include materials and methods, results, discussion, summary or heading abstract, literature cited, and figures and tables, as appropriate to the student's discipline. The format of the dissertation or thesis will be in conformity with the style manual or guide approved by the student's department and the Graduate School, as well as with the Graduate School dissertation and thesis manual. Documentation and format must be consistent throughout the dissertation or thesis.

2. The Manuscript Style:

The manuscript style permits the inclusion of one or more manuscripts, submitted or to be submitted to scholarly journals, as chapters or sections of the dissertation or thesis. Each manuscript must be prepared in the style of the appropriate scientific journal, but instructions peculiar to submission of manuscripts to editors must be eliminated. Each manuscript must blend appropriately with the other parts of the dissertation or thesis, with the exception of the particular differences required by journals (e.g., literature citations, table designations). Paper with numbered lines, as required by some journals, will not be used. Captions must accompany each figure on either the same or facing page of each manuscript. No reprints or photocopies of reprints will be permitted. If the manuscript style is used, the student must be the first author of each manuscript. The names of all authors, in journal-submitted order, and the name of the journal (with volume, page numbers, and date, if known) must be given as a footnote to the title on the first page of each manuscript, to indicate the current status of each manuscript. Continuous pagination is required throughout the dissertation or thesis. The usual requirements for margins, consistency in chapter or section titles, and other mechanics as specified in the Graduate School dissertation and thesis manual will apply.

Hard-bound copies of theses and dissertations are no longer required by the Department of Plant Pathology. The need for additional hard copies (e.g., for the student's committee members) is at the discretion of the major professor and advisory committee. Thesis/ dissertation print orders may be submitted to <u>Tate Student Center Print & Copy Services</u>.

PERTINENT GRADUATE SCHOOL POLICIES

I. Academic Probation and Dismissal

A student with a cumulative graduate course grade point average below 3.0 for two consecutive semesters goes on academic probation. The student then must make a 3.0 or better average each succeeding semester. The student is no longer on probation when the cumulative average is 3.0 or above. Dismissal will result if a student makes below a 3.0 semester average while on probation. When a student repeats a course, the last grade will be utilized to calculate the cumulative average that is used for probation, dismissal and graduation.

II. Grades of Incomplete

Students must remove an "I" grade within three semesters (including summer) in residence or it becomes an "F".

III. Degree Activities Abroad

If your graduate program entails conducting research abroad, you must contact the UGA <u>Office of</u> <u>Global Engagement</u> (OGE) prior to departure. OGE staff will provide you information sheet/list of websites and resources, an insurance enrollment form (mandatory if student is getting credit, otherwise optional), and a waiver to sign.

IV. Admission to Candidacy (Ph.D. only)

No Ph.D. student is a formal candidate for the doctoral degree until Admission to Candidacy is approved. The Admission to Candidacy form is submitted online when the student passes his or her oral comprehensive exam (https://grad.uga.edu/index.php/current-students/forms/).

The student may be admitted to candidacy when:

1. The Program of Study has been approved.

- 2. The advisory committee, including any necessary changes in the membership, is confirmed and all its members have been notified of their appointment.
- 3. Any requirements set as prerequisite for admission have been completed.
- 4. A dissertation proposal (prospectus) has been approved.
- 5. A formal proposal presentation has been given to the advisory committee.
- 6. All milestones have been met (APPENDIX 1).
- 7. The average on all graduate courses taken is 3.0 or higher and there is no grade below 2.0 for any course on the Program of Study.
- 8. Preliminary written and oral examinations have been passed and reported to the Graduate School.
- 9. The residence requirement has been met.

V. Application for Graduation

Students may graduate at the end of any of the three semesters. A Registrar's Graduation Form must be filed electronically. For the specific dates, check the "<u>Important Dates/Deadlines</u>" list in the "Current Students" section of the Graduate School home page.

IV. Time Limits

Initial time limit (before candidacy): All requirements for the degree, except the dissertation and final

oral examination, must be completed within a period of six years. This time requirement dates from the beginning of the semester during which the first course on the program of study was taken. Time limit for Ph.D. candidates: A candidate for the doctoral degree who fails to take the final oral examination (dissertation defense) within five years after passing the qualifying examinations and being admitted to candidacy will be required to take another preliminary examination and be admitted to candidacy a second time.

OTHER RELEVANT DEPARTMETNAL POLICIES AND REGULATIONS

I. Outreach / Recruiting Experience

Supervised experiences in public outreach and recruiting are important as graduate students become prepared for their professional responsibilities after graduation, and thus are considered an integral part of each degree program. Hence, all M.S. and Ph.D. students are expected to participate in a minimum of one outreach or recruiting event per year. The time requirement for the event is not expected to exceed one day. The Education Program Specialist in the Department will coordinate these activities to accommodate the schedules of students in a fair and equitable manner. Approval from the student's Major Professor will be required for each such outreach event.

II. In-state and Out-of-State Travel and Availability of Financial Support

Payment of travel expenses for students to scientific meetings is dependent primarily on availability of funds in the Major Professor's research or extension program. In some cases the department may be able to supplement students' travel expenses to scientific conferences. It is the intent and priority of the department that travel for a Ph.D. student presenting a paper at a national meeting be supported at least once during the student's program of study. Additionally, all students should have the opportunity to participate in the annual meeting of the Georgia Association of Plant Pathologists. However, not all incurred expenses during the travel period can be covered by departmental funds.

Students who plan on requesting department support to attend the Annual Meeting of the American Phytopathological Society (APS) are expected to apply for an APS Student Travel Award. In addition to departmental funds, the Graduate School also has limited funds to assist Ph.D. student travel to present papers at professional conferences within the United States. Requests should be initiated as soon as possible by contacting the Graduate Coordinator. For current regulations on travel see the Graduate School site at http://www.uga.edu/gradschool/financial/travel.html

All travel must be approved prior to making a trip. In-state travel must be approved by the Major Professor. Out-of-state travel (e.g., international, national or regional meetings) requires university approval. In all cases, salient account information from the Major Professor will be needed before the student reaches out to the office staff regarding a Travel Authority or reimbursement. Failure to obtain approval prior to travel may result in no reimbursement for expenses.

III. Supplies, Equipment, and Greenhouse Facilities

As a rule, departmental resources such as state vehicles, color printers, photocopiers, departmental mail service, and office supplies are to be used for official purposes only (no personal use). Official purpose does **not** include office supplies and photocopying (department or library) needed for classes in which a student is enrolled. These are personal supplies and expenses that a student should pay.

Students shall have access to supplies, equipment, and greenhouse facilities, and lab or field facilities for the conduct of their research. If special equipment, supplies, labor, or transportation are needed, arrangements shall be made with the major professor. Faculty members must be consulted if equipment or supplies are needed from their laboratory. Classroom laboratory supplies are not to be removed from the teaching laboratories for use in a student's research or other purpose. Special regulations for use of facilities will be formulated as needs arise. Students also should become familiar with guidelines for greenhouse by scheduling a consultation with the local greenhouse supervisor via their major professor or lab manager.

IV. Office Staff and Resources

Our office staff is available to assist with the following items: obtaining keys and office space, information pertaining to your graduate assistantship, travel authorities and reimbursements, purchase orders, mail, faxes, and inquiries relating to telephone usage. Any personnel and budgetary questions should be directed to the financial staff.

V. Mail

Campus and U.S. mail is delivered to the Department daily, Monday through Friday and is placed in your assigned mailbox in a timely manner. Outgoing mail is collected each morning by campus personnel. Do not have personal mail sent to your departmental address. Please consult with your Major Professor for items to be sent by courier (e.g., UPS, FedEx, DHL).

VI. Photocopying

Research and instruction materials related to as student's duties as a teaching assistant may be photocopied in the departmental office at no charge.

VII. Computers

On the Athens Campus, a Plant Pathology graduate student computer lab is available for student use (3301 MPS), as well as the first floor Miller Plant Science Building computer lab (1203 MPS). Students are expected to have their own laptop or appropriate device for routine word processing, presentations, etc.

VIII. Keys

Contact the office manager in Room 2105 for any keys to the Miller Plant Sciences Building needed for your research or teaching needs. The Department will furnish your first set of keys. However, duplication of any lost key will result in the charge to you of \$3.00/key. Keys must be returned when you leave the department. The office manager will also be able to help you get after-hours access to the Plant Sciences Building via keyless access with your UGA MyID card.

IX. Use of State Vehicles

Graduate students may drive state vehicles only if they have a valid driver's license and permission of their major professor. Furthermore, the University of Georgia now requires a Motor Vehicle Record (MVR) check to be completed for each employee driving a state vehicle. Under these conditions, insurance policies covering University vehicles will be in effect. Personal use of state vehicles is not permitted. See major professors regarding fuel and fuel expenses. Individuals not directly involved in the University program (e.g., spouses, children, relatives, etc.) are not permitted as drivers or passengers in UGA vehicles.

MISCELLANEOUS INFORMATION

I. Library Opportunities

All science books and journals are housed in the Science Library in the Boyd Graduate Studies Research Center. Books may be checked out for 2 weeks: journals may not be taken out except by faculty. However most journals are available electronically to all UGA personnel via the E-Journals link on the UGA Library home page. Books and journals that are not in the library may be obtained through the Interlibrary Loan Service. Request for this service can be made online by searching for "Interlibrary Loan" on the UGA Library home page. All requests for this service must be approved by your Major Professor. If you encounter books or journals needed for your research or course work that are not in the library, please pass this information on to the Library via the "Request a Purchase" option under the "Services" link on the UGA Library homepage.

Study carrels are available to graduate students that are intended for students in the process of writing their theses or dissertation. Carrels are assigned on a semester basis and requests for carrel assignment should be made to the Circulation Librarian.

II. Society of Aspiring Plant Pathologists

The purpose of the <u>Society of Aspiring Plant Pathologists</u> shall be to foster interaction and collegiality among students, post-doctoral associates, and faculty in the department of Plant Pathology at the University of Georgia. This organization also aims to improve the quality of graduate and postdoctoral programs in the department and betterment of student teaching as well as professional development.

III. Other organizations available to students

There are numerous organizations available to students at the University of Georgia (http://grad.uga.edu/index.php/current-students/student-organizations/), including the University Graduate_student_association).

IV. Kenneth E. Papa and Cedric Kuhn Graduate Student Awards

The Georgia Association of Plant Pathologists (GAPP) presents an annual Kenneth E. Papa and Cedric Kuhn Graduate Student Award to recognize excellence in the pursuit of graduate studies at the Ph.D. and M.S. levels, respectively, in the Department of Plant Pathology. Both of these awards include a

memento of recognition and a monetary gift. The name of the students selected will also be added to a permanent plaque in the departmental conference room in Athens. Additionally, GAPP will recognize the outstanding graduate student presentation at its annual meeting and will award a memento of recognition. Procedures for nomination and selection as well as selection criteria are given in Appendix 2.

V. E. Broadus Browne Award

The College of Agricultural and Environmental Sciences (CAES) yearly recognizes the contributions of graduate students to the research programs in the College. The E. Broadus Browne Awards are given to an M.S. and Ph.D. student for excellence in conducting and communicating research essential to the CAES mission. The award recognizes the many contributions of E. Broadus Browne, former Resident Director of the Georgia Agricultural Experiment Stations. The award is a check and expenses paid to a national meeting. The Graduate Coordinator with the help of the Graduate Studies Committee coordinates nominations for these awards from the Department of Plant Pathology.

VI. The American Phytopathological Society

The American Phytopathological Society (APS) is the premier scientific society of professionals working in areas related to plant health. Students are an important component of the diversity of membership of APS that reflects the range of vocational opportunities for plant pathologists. Joining APS will facilitate you obtaining the latest information on new advances in all aspects of plant pathology, network you with fellow plant health professionals from around the world via publications, meetings, and special events, make you eligible to apply for student travel awards to the APS national meeting, and facilitate you becoming prepared for employment after graduation. More information and the application form can be found at http://www.apsnet.org.

APPENDIX 1

Plant Pathology Graduate Student Milestones

I. Overview

The milestones for M.S. and Ph.D. students outlined below support the requirements specified in the Graduate Student Manual. This information is provided to inform students of the academic milestones that they will be expected to reach in order to earn their M.S. or Ph.D. degree in plant pathology in a timely manner. The students are expected to review the milestones carefully and understand their obligations. Each student has the primary responsibility for meeting all of the required deadlines for his/her degree program. At the end of each fall semester, students will provide an updated report of their milestones annually. Progress reports from all M.S. and Ph.D. students will be reviewed by the faculty to monitor the student's progress in accomplishing the milestones and completing their degree in a timely manner.

A. Milestones for Plant Pathology M.S. Students. *Indicates Graduate School Hard Deadlines.

Procedure	Initiate Through	Approved By	Suggested Deadline
 Consult with major professor to select courses for first semester. 	Major Professor	Major Professor	Before first semester registration.
(Plant Pathology Graduate Student Manual, <u>click here</u>).			
 Meet with major professor to discuss research project and establish expectations. 	Major Professor	-	Before or during first semester.
 Meet with major professor to discuss program of study. 	Major Professor	Major Professor	During first semester.
4. Submit advisory committee form through GradStatus, <u>click here</u> .	Major Professor	Major Professor and UGA Graduate School	During first or second semester.
 Meet with advisory committee to discuss proposed research project and approve program of study. Annual advisory committee meeting. 	Major Professor	Major Professor and Advisory Committee	During second semester.
 Meet with Graduate Coordinator to review program of study before 	Major Professor	-	By the end of second semester.

submission to the Graduate School.		Committee and Graduate Coordinator	
7. Submit program of study to the Graduate School for approval through GradStatus, <u>click here</u> .	Major Professor, Advisory Committee and Graduate Coordinator	UGA Graduate School	By the end of second semester.
8. Meet with advisory committee to discuss research project and program progress. Annual advisory committee meeting.	Major Professor	Major Professor and Advisory Committee	During fourth semester. Continue with annual advisory committee meetings until graduation.
 Schedule exit seminar and final defense. (Register for PATH 8150). (Send final defense date to Graduate Coordinator at least three weeks before the defense date). 	Major Professor, Advisory Committee	Major Professor, Advisory Committee	During graduation semester (fourth or fifth semester). For specific dates each semester, <u>click here</u> .
10. *Apply for graduation. Check for final date for completing all requirements, <u>click here</u> .	Major Professor, Advisory Committee and Graduate Coordinator	UGA Graduate School	During graduation semester (fourth or fifth semester).
11. *Submit one copy of thesis for format check.	Major Professor and Advisory Committee	UGA Graduate School	Graduate School important dates and deadlines, <u>click here</u> .
12. *Submit final Defense Approval Form & ETD Submission Approval Form and final corrected ETD.	Major Professor and Advisory Committee	UGA Graduate School	Graduate School important dates and deadlines, <u>click here</u> .

B. Milestones for Plant Pathology Ph.D. Students. *Indicates Graduate School Hard Deadlines.

Procedure	Initiate Through	Approved By	Deadline
 Consult with major professor to select courses for first semester. (Plant Pathology Graduate Student Manual, <u>click here</u>). 	Major Professor	,	Before first semester registration.
2. Meet with major professor to discuss research project and	Major Professor	Major Professor	Before or during first

establish expectations.			semester.
3. Meet with major professor to discuss program of study.	Major Professor	Major Professor	During first semester.
 Submit advisory committee form through GradStatus, <u>click here</u>. 	Major Professor	Major Professor and UGA Graduate School	During first or second semester.
 Meet with advisory committee to discuss proposed research project and approve program of study. Annual advisory committee meeting. 	Major Professor	-	By the end of second semester.
6. Meet with Graduate Coordinator to review program of study before submission to the Graduate School.	Major Professor	-	By the end of second semester.
7. Submit program of study to the Graduate School for approval through GradStatus, <u>click here</u> .	Major Professor, Advisory Committee and Graduate Coordinator		By the end of second semester.
8. Submit proposal to advisory committee at least 4 weeks before the scheduled advisory committee proposal presentation to receive committee feedback and to incorporate changes into the formal proposal presentation.	Major Professor and Advisory Committee	-	By the end of fourth semester.
 9. Give formal proposal presentation to advisory committee. Formal PowerPoint presentation (40 min) with proposal details followed by Q&A from advisory committee. Also serves as annual advisory committee meeting. 	Advisory Committee	and Advisory Committee	By the end of fourth or fifth semester. Proposal presentation given after a draft proposal has been vetted by the student's advisory committee.
10. Complete all pre-candidacy course requirements. (Plant Pathology Graduate Student Manual, <u>click here</u>).	Major Professor and Advisory Committee	-	By the end of fifth semester.

 Schedule and complete comprehensive exams. Send oral exam date to Graduate Coordinator at least three weeks before the exam. 	Major Professor, Advisory Committee and Graduate Coordinator	UGA Graduate School	Fifth or sixth semester.
12. Apply for admission to candidacy after successful completion of oral exams.	Major Professor and Advisory Committee	UGA Graduate School	Fifth or sixth semester.
13. Meet with advisory committee to discuss research and program progress. Annual advisory committee meeting.	Major Professor and Advisory Committee	Major Professor and Advisory Committee	By the end of sixth semester. Continue with annual advisory committee meetings until graduation (by the end of eighth or ninth semester).
 14. *Schedule exit seminar and final defense. (Register for PATH 8150). (Send final defense date to Graduate Coordinator at least 3 weeks before the defense date). 	Advisory Committee	Major Professor, Advisory Committee	During graduation semester (eighth or ninth semester). For specific dates each semester, <u>click here</u> .
15. *Apply for graduation. Check for final date for completing all requirements, <u>click here</u> .	Major Professor, Advisory Committee and Graduate Coordinator	UGA Graduate School	During graduation semester (eighth or ninth semester).
16. *Submit one copy of dissertation for format check.	Major Professor and Advisory Committee	UGA Graduate School	For Graduate School important dates and deadline, <u>click here</u> .
17. *Submit final Defense Approval Form & ETD Submission Approval Form and final corrected ETD.	Major Professor and Advisory Committee	UGA Graduate School	For Graduate School important dates and deadline, <u>click here</u> .

C. Semester Reminders:

- All plant pathology MS and PhD students on an assistantship must register for a total of <u>18 credit hours each semester, including the summer</u>. After course credits, add PATH 7000 (MS students) or PATH 9000 (PhD students) research credits to reach 18.
- 2. Register for PATH 8150 (Plant Pathology Graduate Seminar) <u>only during the semester</u> you plan to present your exit seminar (1 credit hour, exit thesis or dissertation defense

seminar). Plant Pathology MS and PhD students are required to attend each departmental seminar, even if they are not registered.

3. All M.S. and Ph.D. students are required to <u>enroll in PATH 8170</u> for the first 4 semesters for MS students and for the first 6 semesters for PhD students (counting fall and spring semesters only) unless there is a course conflict. Course conflicts must be excused by the colloquium coordinator(s) prior to the beginning of the semester. A maximum of 2 or 3 credits earned from this course may be applied toward the MS and PhD requirements, respectively.

APPENDIX 2

Kenneth E. Papa and Cedric Kuhn Graduate Student Awards (revised 11/2021)

I. Procedures for nomination and selection

1. The graduate coordinator will send an email to the department requesting nominations for the Kuhn and Papa awards.

2. Faculty/student will send an email to the graduate coordinator indicating their interest in nominating a student/peer.

3. The graduate coordinator will send a <u>Qualtrics Nomination Form</u> to the nominator requesting a nomination letter and additional nominee information by the deadline.

4. The Graduate Coordinator will send a <u>Qualtrics Nominee Information Form</u> to the nominee requesting additional information and a CV to support the nomination letter.

5. After the submission deadline, the Plant Pathology Graduate Studies Committee will review and select the awardee based on the selection criteria outlined in the Qualtrics nomination/nominee information forms (See below selection criteria).

II. Selection criteria

1. Graduate Academic Performance (10%):

A) GPA

B) Quotes in nomination letter from nominee's instructors describing performance in course(s)

2. Professional Development (Include examples for each) (30%):

A) Demonstration of Leadership

B) Performance in teaching, extension and/or other career-supporting skill areas

C) Demonstration of mentorship and/or scientific outreach

D) Involvement with professional societies

E) Internal and external awards and honors earned during the UGA plant pathology graduate program

3. Publication and Presentation History (30%):

(Publications must be from UGA masters or doctoral project only. Include your contribution to the research project and the publications)

4. Faculty/Peer Letter of Support and Evaluation (30%):

(Will be submitted by the nominator)

A) Independence

B) Collaboration/team work

C) Innovative thinking

D) Resourcefulness

E) Reliability

F) Critical thinking

G) Professionalism (Attitude, dedication and motivation)

H) Quotes from nominee's instructors describing performance in course(s)