Plant Pathology Guide for Graduate Students

A quarter-by-quarter plan

A. Year 1 - Fall Quarter (when most students arrive).

Welcome to UC Riverside! We are glad you have chosen us for your graduate training. Please consult the <u>CNAS Graduate Student Affairs Website</u> for a helpful checklist to prepare for your arrival.

1. Housing. The most important item is to find housing if you have not already done so prior to your arrival. Word-of-mouth among other students is a good source, as students frequently may need an extra roommate to share the cost of renting a house or large apartment. You can contact the housing office at <u>www.housing.ucr.edu</u> to obtain more information on housing. There are various internet sites that may be helpful, such as <u>www.rent.com</u>, <u>www.apartmentguide.com</u>, and many others. The Press-Enterprise or classified newspapers found in shopping malls are a good source also. Rent varies according to location, so beware! To live within walking distance of the campus, be prepared to spend about \$925/month for a one-bedroom apartment. Houses near UCR rent for \$1,600/month, which is within the range of shared expense among a few students.

2. **Staff of the graduate program.** During the 18 Fall quarter, Caroline Roper will be both the Graduate Advisor for Enrolled Students and the Graduate Advisor for Recruitment. Dr. James Ng will be the Graduate Advisor for Enrolled students during the 19 Winter and 19 Spring quarters. Dr. Katherine Borkovich is Chair of the Microbiology and Plant Pathology Department; and Laura McGeehan is the Student Services Advisor (SSA) that handles the day-to-day operation of the program. You can rely on these individuals to help you with questions, concerns, advice, problems, etc. The phone numbers, e-mail addresses, and office locations of the staff, students, and faculty are listed in the appendix at the back of this document.

Here are some helpful websites for navigating your way through the graduate program, and handling general questions:

- Registration and Academic Affairs:
 - Registrar's office and academic calendar: <u>http://registrar.ucr.edu/registrar/academic-calendar/</u>
 - Graduate Division petitions and forms, academic procedures: <u>http://graduate.ucr.edu/current_students.html</u>
 - Access R'Grad for electronic forms through <u>R'Web</u>
 - Check your Degree Audit through <u>R'Web</u>
- **Financial**:
 - Access your student account: Access through <u>R'Web</u>

- Schedule for fellowship disbursement: http://registrar.ucr.edu/registrar/academic-calendar/
- Payroll calendar: <u>http://accounting.ucr.edu/payroll/pay_cal.html</u>

3. Helpful literature. You may download the UCR Graduate Student Handbook from http://graduate.ucr.edu/forms/GSHandbook.pdf.

4. Registration. This is a priority item to focus your attention. Pay attention to the final date for registration as listed in the Fall Schedule: you will pay a penalty if you do not register before then. The SSA will assist you with the mechanics of online registration, and direct you to the offices of the Graduate Division, Registrar, or other Academic Departments as needed. Before you register, however, you need to know what courses you will be taking. If you have already chosen a major professor, you should meet with him/her to seek advice on what courses to take. If you have not chosen a major professor, the Graduate Advisor for Enrolled Students will help you in this task. Enroll in at least **12 graduate student units every quarter**. This usually will consist of a mixture of 2 or 3 formal classes, a seminar, and some research units. Students enroll in research units with the section number of their major professor or rotation. Only 200 or 300-series courses are graduate courses.

5. Major Professor. Some of our students enter the program with a major professor, who will provide you with support and guidance in your research and other aspects of your graduate career. If you have not selected a major professor, you should meet with the Graduate Advisor for Enrolled Students who will give you advice on choosing one. This will involve reviewing the list of Plant Pathology faculty and their research interests, and making appointments to chat with several of the faculty that you might like to work with. If you wish, the Graduate Advisor for Enrolled Students will assist in placing you in one or more faculty laboratories for a lab rotation in your first year. A lab rotation accomplishes the following: 1) exposes the student to research in a faculty member's laboratory, 2) earns research credits for registration, and 3) provides a physical location (desk, bench space). During the rotation, you should start reading the scientific literature related to that lab's research and get involved in the research life of the laboratory that you may choose as your "home away from home" for the next few years. There is no fixed time limit on a lab rotation, but they are generally for 5 weeks. Students often rotate in the labs of one to three professors. Most students choose a Major Professor by the end of winter guarter, but no later than the end of spring quarter. Please let your SSA know when you have chosen a major professor.

6. Student Advisory Committee (Guidance Committee). In consultation with the Graduate Advisor for Enrolled Students, you need to select your Student Advisory Committee sometime during the first year. The nomination of this committee should be submitted to the SSA using the Advisory Committee Form (see Forms Section of handbook) and approved by the departmental Graduate Affairs Committee (GAC), which consists of the Graduate Advisor for Enrolled Students and other faculty. The Advisory Committee should consist of your **Major Professor as Chair plus two other faculty members**. The two other faculty members will be available to provide input for selecting courses throughout your matriculation, and can also provide other advice as appropriate. Your committee members

can often solve issues and problems; you should consult with them in addition to, or prior to, involving the Graduate Advisor for Enrolled Students. Often, the Advisory Committee will later become your Thesis (or Dissertation) Committee when you prepare your thesis defense (M.S. students) or shortly after you have been advanced to candidacy (Ph.D. students). However, your research interests may change during your matriculation, so that the Advisory Committee may not necessarily be the same as the thesis committee.

7. Online Safety training through the UC Learning Center. As a UCR graduate student, you are required to complete the Lab Safety Orientation provided by Environmental Health & Safety (EH&S). You may enroll in a training session via the following website: http://ucrlearning.ucr.edu/. If you have any questions or problems accessing the online training, please contact the UCR Learning Center at ucrlearning@ucr.edu.

Go to http://ucrlearning.ucr.edu/

- Use the UC Affiliate Access Tool on the bottom of the page on the left side under "Student and Affiliate Access" (DO NOT use the big yellow "login" button)
- Login using your UCR Net ID and password

If you experience any problems first check out this useful site with information about browsers, access challenges, etc.: http://cnc.ucr.edu/lms/#tips

8. **Selecting courses.** Near the beginning of your time at UC-Riverside, you need to plan your course schedule. See the Program Course Plan to help you form your schedule. This will need to be reviewed and approved by the department's Graduate Affairs Committee (GAC). With guidance from your major professor and Student Advisory Committee, or if you have not yet selected a lab, the Graduate Advisor for Enrolled Students, plan a set of courses for the 1-2 years of training. This generally includes the 6 required courses: Introduction to Plant Pathology (PLPA 210), Introduction to Mycology (PLPA234), Fungal Diseases of Plants (PLPA 200), Phytopathogens: Nematodes (PLPA 206), Viral and Bacterial Diseases of Plants (PLPA 207) and Colloquium on the Principles of Plant Pathology (PLPA 265). You also need to complete any deficiencies that you may have had in your preparation for graduate training. For additional courses, consult the UC Riverside/Plant Pathology Requirements document (see appendix 1-2) for further guidance. Also, include enrollment in Plant Pathology seminar (PLPA 250) every quarter when offered (Fall and Winter). M.S. students have a minimum unit requirement that is listed in the UCR catalog and in this document. No formal unit requirement exists for students to graduate from the Ph.D. program. Please note that you must maintain a minimum of 12 units each guarter, which include research units.

Be aware of the need to present a short research seminar in PLPA250 each year, excluding during your first year. Students may present during Fall or Winter Quarter, depending on the year.

The 1-2 year plan of courses that you propose in your initial meeting with the Student Advisory Committee can be changed at a later date. Generally, as student progress though the program they think of additional courses to take, and modify their curriculum plan accordingly with approval of their major professor and the Graduate Advisor for Enrolled Students. The Graduate Affairs Committee (GAC) should be consulted if major changes in the curriculum are planned, however. There are no course unit requirements for the Ph.D. beyond the core courses listed previously. You must either take these or demonstrate sufficient knowledge through previous experience or training. Additional guidance in selecting courses, including "tracks" which list courses that may be appropriate for sub-specialties within Plant Pathology, are listed at the end of this document.

At the end of the first quarter, we advise students to log into their R'Web and open their Degree Audit to see their progress towards their degree.

B. Year 1 - Winter Quarter

1. Registration and courses. Enroll in at least **12 graduate student units. Pay attention to the deadline in the schedule, as you will receive a bill from accounting if you do not register in time.** This deadline normally is at the end of the fall quarter.

2. Research. If you have chosen a major professor, the intensity of your involvement in laboratory research normally increases during this quarter. With your major professor, discuss possible research projects, which could become your Thesis or Dissertation Research. Read the literature on these topics and begin to learn the techniques you will need to complete the research. If you have been rotating in different labs, hopefully you are starting to get an idea about what your "permanent" lab will be. When starting work in a lab, always ask the professor if there are any lab-specific safety practices you should be aware of or additional EH&S training that you should take.

C. Year 1 - Spring Quarter

1. Registration. Enroll in at least **12 graduate student units, again paying attention to the deadline that comes near the end of the winter quarter**.

2. Major Professor. If you have not already done so, select a Major Professor and a research project that will be the basis of your thesis (dissertation) before the end of this term. This is particularly important to students (the majority) who do not hold UCR long-term fellowships. The Plant Pathology Program reserves most of its operating budget to fund first year students and generally relies on the faculty to support students during the summer and beyond. Thus, it is important that you find a faculty member who can provide financial support.

3. Annual Student Evaluation. During the Spring Quarter, you will meet with your Advisory Committee in order for your Major Professor to prepare the Annual Evaluation. You should provide the committee with a copy of your transcript from UCR and any other institution where you studied. You should also provide an outline of your proposed research project for the committee's critical evaluation. The committee will review your curricular plans for the coming year; your major professor will be responsible for writing the Annual Evaluation (see form in Appendix 6-7 Section of the handbook). Please note that your entire committee must be present for your annual progress meeting and that all members must

sign off on your forms.

4. M.S. Students: Students need to stay in communication regarding completing their degree requirements. Note: in some cases, additional time is needed. If so, you and your advisor need to be in agreement on this issue, which should be brought to the attention of the Graduate Advisor for Enrolled Students.

5. Opportunities to serve as a teaching assistant. The Plant Pathology program does not require its students to serve as a teaching assistant (TA), however on occasion our students do serve in this capacity. Acting as a TA can provide useful experience for those students planning on a career in education, adds to the student's communication skills, and in some cases a TA appointment may be a component of the student's financial support package. If a student is interested in serving as a TA, they should first consult with their major professor to get their permission and to plan when this might best be done. Graduate students receive periodic solicitations from the College of Natural and Agricultural Sciences (CNAS) for TA applications, typically during Spring quarter. Opportunities are not limited to those within the department as students can be appointed to TAships in classes in Biology, Biochemistry, etc. If a student is selected for a TAship, they should also complete the campus Teaching Assistant Development Program (TADP) orientation prior to or concurrent with the teaching assignment.

D. Year 1 - Summer Quarter

1. Now you are free of classes—at least until Fall! Now is your chance to devote all of your energy into research.

2. Discuss with your major professor if there are any scholarly meeting or other career advancing activities on campus that could be accommodated during your first summer. You should probably bring this up in the Spring Quarter if arrangements need to be made.

E. Year 2 - Fall, Winter, and Spring Quarters

1. Enroll in at least <u>12 graduate student units/quarter – paying attention to</u> <u>the deadline</u>. Continue taking classes, if needed, and participating in research. Discuss with your major professor about attendance/presenting at a regional or national scientific meeting.

2. If you are in the Masters program:

a. <u>M.S. Plan I (Thesis):</u> Although the normal time for completion of an M.S. degree is two years, the actual time may differ slightly. A minimum of 36 units of graduate (200 level) and upper division (100 level) courses are required for the master's degree. At least 24 of these units must be 200 level courses in Plant Pathology or Nematology. Of these 24 graduate level courses, no more than 6 units of courses from the 290 to 299 level may be used towards this requirement.

During the second year, you should meet regularly with your Master's Thesis Committee -- at least once each guarter -- to ensure that you are on the right track with your research and avoid surprises when you submit a draft of your thesis to the committee. Also, discuss with your Major Professor your plans for the future. If you want to switch from an M.S. to a Ph.D. program, you need to file an official form with the Graduate Division that must first be approved by your committee and the Graduate Advisor for Enrolled Students. The form is called "Petition for Change in Major, Credential or Degree Objective" (Form 1), it can be downloaded from the Graduate Division website, www.graduate.ucr.edu or picked up in the College of Natural and Agricultural Sciences Graduate Student Affairs Center, 1140 Batchelor Hall. If you plan on going to another university, you should apply to those schools in the fall guarter. If you intend to find a job, you should initiate inquiries several months before you complete your thesis. Anticipate that it will take you at least two to three months to write your thesis, after completing your experiments. The Graduate Division has specific rules and regulations governing theses and holds regular workshops on preparing the thesis (usually once each quarter). Obtain a copy of a recent M.S. thesis to be sure that you are following the correct format required by the Graduate Division. You need to file an Application for Advancement to Candidacy with Graduate Division no later than the first week of the quarter in which the degree is to be awarded on R'Grad. Completion of your Master's degree requires a formal presentation of your research to your Research Committee, who must sign their approval of completion of this requirement. Once this is signed, congratulations! You have completed the M.S. (Plan I) degree in Plant Pathology!

b. <u>M.S. Plan II (Comprehensive):</u> A minimum of 36 units of graduate (200 level) and upper division (100 level) courses are required for the master's degree. At least 18 of these units must be 200 level courses in Plant Pathology or Nematology. None of these courses may be numbered 297 or 299. Every candidate must take a comprehensive written and oral examination in the major subject from their faculty committee. When you pass this exam, *congratulations! You have completed the M.S. (Plan II) degree in Plant Pathology!*

3. If you are in the Ph.D. program:

a. Courses: After their second year, most students have taken all or most of their courses. Their minds then turn towards passing the qualifying examination. **QUALIFYING EXAMINATIONS ARE A DISTINCT ASPECT OF THE PH.D. REQUIREMENT.**

b. <u>Qualifying Exams:</u> The exams are generally taken at the end of the student's sixth academic quarter (second year), although this timing is dependent on completion of course work essential for the student's program. You must have completed <u>ALL</u> course work requirements prior to the written and oral qualifying examinations. Please check your Degree Audit (available on your R'Web), to make sure you have completed all requirements and that you have resolved any No Credit (NC) or Grade Delays (GD) before qualifying.

Special note on the Qualifying Exams for International Students:

International students must advance **before** the beginning of their 7th quarter in residence to qualify for reduced Nonresident Supplemental Tuition (NRT) for their remaining quarters. After advancement, international students have 9 additional quarters of reduced NRT.

The composition of the Qualifying Exam consists of three parts, which is administered by the Qualifying Exam Committee in the following chronological order: the Dissertation proposal, the written exam, and the oral exam. After successful completion of the Oral Examination, you will be "advanced to candidacy."

c. <u>The Qualifying Exam Committee:</u> You should nominate faculty members for your Qualifying Exam Committee after consulting with your Major Professor and Graduate Advisor for Enrolled Students. Contact each prospective member to ensure that they are willing to serve on the qualifying exam. Submit your suggestions on the PLPA Qualifying Exam Nomination Form (*see Appendix 6-7 Section of the handbook*) to the Graduate Affairs Committee, who will review this with its members and make final selections including the chair for the Qualifying Exam Committee.

This committee will consist of 5 members: the majority of which must be faculty participating in the Plant Pathology graduate program and the fifth must not be a member of the program. *Your major professor is not permitted to serve on this committee*. Some, but not necessarily all members of your committee members should have scientific expertise in your area of research specialization. It is appropriate to consider professors from whom you have taken classes. Breadth in Plant Pathology is important in making your selection of faculty. Establish a tentative date and time for the written and oral exams. Submit to the GAC nominations for the exam committee. When approved by the GAC, the student will file a "Nomination for Qualifying Examination for the Degree of Doctor of Philosophy on R'Grad (available on the student's R'Web). The form will be routed to the Graduate Advisor for Enrolled Students, the SSA and then to Graduate Division. Once your committee is approved by Graduate Division you may contact the professors on your committee to see if they have study questions on file.

Upon approval of the Qualifying Exam Committee, the chair will contact the Graduate SSA and review the student's file to ensure that he/she can proceed to the next step. The Committee Chair will discuss with you the materials that the student is responsible for in the written and qualifying exam.

All committee members must be members of the Academic Senate, unless approval for a non-senate member has been granted by the Dean of the Graduate Division. The committee is subject to approval by the Graduate Affairs Committee and Graduate Division.

d. <u>The Dissertation Proposal:</u> A Dissertation proposal is a scholarly original document that should be submitted to all members of the Qualifying Exam Committee at least <u>two</u> <u>weeks prior</u> to the written exams. The proposal should be typed and double-spaced. Although the exact style of the proposal can vary, the proposal should include the following:

A summary in your own words of relevant background information (2-3 pages)

Full justification for the dissertation research (1 page)Current research progress (3-4 pages)Future research directions (3-4 pages)Bibliography to demonstrate a command of the relevant literature (2-3 pages)

Figures and tables are not included in the above page estimates and can be either integrated into the text (preferred) or placed at the end of the document.

In the section entitled future research directions, it is important that the specific hypothesis or research question(s) being addressed are carefully stated. Identify specific aims or objectives which address these issues, the specific methods to be employed, and possible results. Be sure to include proper controls, and indicate how data might be interpreted and what might be done next if the results do not support any hypotheses that are stated.

The pages shown are not page limits, merely guidelines. Each student is being asked to demonstrate his/her understanding of the current and proposed research and the scientific method. Since this research directly reflects the student's major professor's research program and interests, it is natural for the major professor to have a guidance role for the proposed research directions. Although he/she can approve the content of the proposal, the Committee does <u>not</u> want the major professor to directly participate in the organization and writing of the Dissertation Proposal.

The student should understand that the proposal does not determine the research requirements for the Ph.D.; this dissertation proposal is simply a vehicle to introduce the Qualifying Exam Committee to the student's current accomplishments and research strategies. It is conceivable that different projects/topics will eventually be researched.

Students are strongly encouraged to plan a public presentation of their research in PLPA 250 before taking the qualifying exams.

e. <u>Written Exam:</u> This will be designed to test the student's ability to synthesize and integrate basic concepts in Plant Pathology. In addition, the Committee expects the student to have a substantive knowledge in the student's area of specialization.

The written exam will normally be held over a period of two days. The exam will consist of a question or set of questions submitted from each committee member that have been forwarded to the chair of the qualifying committee. Questions from the outside member are optional, and may be answered on a third exam day. The chair may request comments from the student's major professor on any aspect of the exam and make modifications that are in agreement with the major professor and all committee members. The chair of the committee will indicate to the student the time length expected for each question set. Normally up to 3 hours are allotted for each professor's questions. The student may choose the order of question sets during the exam period. The student is encouraged to discuss the area of examination to be covered by each committee member directly with each member prior to the exam. Books, notes, or other reference material are not permitted,

unless a committee member indicates otherwise.

Each committee member will grade the answers, which will be returned to the exam chair along with their evaluation. The chair, in consultation with the committee, will determine if the student has passed or failed the exam. The chair will discuss the results with the student, and may allow the student to view his/her answers. However, the exam must remain under the direct control and possession of the chair. The student must successfully complete the written exam before going on to the oral exam.

The outside member has the option to submit written questions for the first part of this exam, but must notify the student and the Committee Chair of his/her option. A faculty member from another institution or a non-academic senate member (e.g., Cooperative Extension Specialist) may be included as a committee member, but this requires prior approval from the Dean of the Graduate Division. The Committee Chair should elicit help from the Graduate Advisor for Enrolled Students in obtaining this approval.

f. <u>Oral Exam:</u> Normally, the oral examination should be scheduled within 7-10 days of completing the written examination. The exam chairperson will bring a form entitled "Report on Qualifying Examination for the Degree of Doctor of Philosophy & Nomination of Dissertation Committee (form 3) obtained from the SSA. Prior to the meeting, the Committee Chair should pick up your file in the student affairs office so that the members of the examination committee may view this should they have questions about your background. You should be prepared to briefly describe your academic history (3-5 min), long-term scientific career goals (2 min), and research project (15 min). This will be followed by questions from each committee member, who will each have approximately 20 min to ask questions: it is *likely* that questions will be related either to the research project (directly or indirectly) or to further explore your breadth of training in Plant Pathology. You will be asked to leave the room at the end of the examination, at which time the members of the committee will discuss your performance.

Upon successful completion of the oral qualifying exam, all members will sign the form. Five or four out of five "yes" grades constitute a pass. You must also at least indicate the chairperson of your dissertation committee (your major professor) on the form 3. Two other faculty members will serve on the dissertation committee as well, and must be formally named within one quarter passing your oral exam. You are encouraged to name your entire dissertation committee at this time on Form 3. These names must be provided to the SSA, who will forward the names for approval by the Graduate Affairs Committee. The signed form 3 should be passed on to the Graduate Advisor for Enrolled Students or Program Chair for approval and then on to the Graduate Division within 48 hours of the exam. You will then be advanced to candidacy.

If the student fails the oral examination, the Qualifying Exam Committee will recommend one of the following options: additional coursework, intensive independent study in the specific area(s) of weakness, or dismissal from the program. Failure to successfully complete the oral examination at the second administration will result in dismissal of the student from the program. The time of the second oral exam will be dependent on the remedial work recommended by the Qualifying Exam Committee; it is expected that the exam will be re-administered within three months to one year. There will be no need to repeat portions of the written examination that have been passed satisfactorily, but the research proposal should be revised to reflect progress.

g. <u>Annual Student Evaluation</u>: In late spring or early summer, you will need to meet with your committee for your annual evaluation. The evaluation is usually completed by the Student Advisory Committee before the qualifying exam is taken, however this sometimes varies depending on the timing of the qualifying exam. If your Dissertation Committee has a different composition than your Student Advisory Committee, you are strongly recommended to meet with the Dissertation Committee soon after the qualifying exam to bring them up to date on your research plan. They may have suggestions that will be helpful in your work

F. Years 3, 4, etc.

1. Time to completion. Most students will have now passed their qualifying exams and can pursue their research full-time. The time to complete the Ph.D. degree is variable and depends on progress in research and scientific maturation.

2. Registration is still required. Between the time of your qualifying exam and filing your thesis (i.e. completing graduate school), it is important to remember that you still must register for classes. After candidacy, students will use the PLPA 299 under the section number of their major professor, instead of PLPA 297. Participation in PLPA 250 is also required.

3. Dissertation committee. The student should meet regularly—at least once per year—with his/her dissertation committee. An annual student evaluation also needs to be done. In consultation with the major professor and the dissertation committee, it will be decided when the student's work has advanced to the point where a Ph.D. dissertation can be written.

4. The Dissertation. The dissertation must be prepared to satisfy the scientific and educational requirements of the student's dissertation committee and in a format acceptable to the UCR Graduate division. Instructions for preparing your dissertation for filing will be sent to you by the Graduate Division at the time you advance to candidacy. The Graduate Division also holds a dissertation preparation workshop once a quarter; announcements are posted and/or emailed.

The completion of a dissertation demonstrates ability to conduct independent, original research. The student's Dissertation Committee (major professor and at least two other members) advises the student in planning, conducting and analyzing the research and writing the thesis. As described below, students defend the dissertation before the Committee in a departmental seminar. Final approval is by the Dissertation Committee and the Dean of Graduate Division.

5. Filing Fee Status. During the quarter in which you expect to graduate, you may submit a request for Filing Fee status through R'Grad which will reduce your cost of tuition and fees. You may do this only once: should you not complete your thesis and need to register for another term, you will not be granted a fee waiver. Students on filling fee have to arrange for their own health insurance coverage. Make sure that you have planned enough time to write and defend the dissertation!

6. Completing the Dissertation. There are two important elements to getting the Ph.D. program completed: (1) the dissertation defense, and (2) getting your committee to give their final approval and signature to the dissertation. Students need to plan these out carefully. Note that <u>Graduate Division</u> has strict deadlines during each quarter for filing the dissertation; if not filed by this date, the student will need to register for the next quarter.

When the preparation of the dissertation has neared its completion, you need to contact the Graduate Advisor for Enrolled Students and schedule a date for defense of your thesis. Once a date has been set for the defense, you must notify the SSA at least three weeks in advance, so that they may prepare a "Report on Final Examinations for the Degree of Doctor of Philosophy" (form 5) for your defense. Much like the form 3, this form must be submitted to the SSA to report the results within 48 hours.

The dissertation defense is an oral presentation that is open to the public, and works very much like a final seminar. Your defense will be advertised to the public by the SSA. You will be given about 35 minutes to present your work. At the end of the presentation, anyone is free to ask questions. At the end of the general question and answer session, the committee generally meets privately with the student to go over questions and issues that might remain. Some concerns may require (hopefully) minor revisions of the dissertation.

Once the committee is satisfied with the dissertation, they will each need to sign the dissertation (you will need to print out pages of the form for them). Make sure that you get enough copies made!

Writing the dissertation and making the final corrections usually takes several months. DO NOT underestimate the time that it will take for the committee to read the dissertation, for you to revise it to their liking, and for them to provide final approval. Usually, your major professor will have corrected your dissertation so that the committee members' comments will most likely relate to scientific concepts and not grammar or writing style, however it is possible that your committee will require many changes. Therefore, giving the dissertation to the committee <u>at least two weeks</u> before the defense is a must, and even further ahead is <u>highly recommended</u>. You should be in communication with your committee members well in advance (several months is not too early!) to inform them of when to expect copies to read. It is usually expedient to provide the committee with chapters as they are completed, instead of waiting until the entire dissertation is written.

Once your committee is satisfied, the Final Examination form (which also needs to be signed by the Graduate Advisor for Enrolled Students or Department Chair) needs to be filed along with the dissertation with Graduate Division. Only they can give final approval for the granting of the Ph.D. degree. NOTE: It is not a good idea to have someone else file your dissertation for you. The peskiest little things crop up at the last minute, which only you can handle!

Congratulations, you have now earned the Academic Title of Ph.D.! Pleased to meet you, Dr. _____.

E. Appendices

Appendix 1. Forms

Masters

Application for Candidacy for Master of Science (on R'Grad)

Used by Masters students preparing to graduate.

<u>Ph.D.</u>

Nomination for Qualifying Examination for the Degree of Doctor of Philosophy (Form 2 on R'Grad)

To be filed upon choosing a Qualifying Exam Committee.

Student provides a list Committee Members and date of written and oral exams for GAC approval. Please contact the SSA in the CNAS Student Affairs Center for questions.

Report on Qualifying Examination for the Degree of Doctor of Philosophy & Nomination of Dissertation Committee (Form 3)

To be completed and returned to Graduate Division upon successful completion of Qualifying Exams: <u>must be submitted within 48 hours of exams</u>.

Please contact the SSA in the CNAS Student Affairs Center to get the form prepared.

Filing Fee Status (on R'Grad)

Can only be requested by students who have completed all degree requirements, except for filing their dissertations/theses or sitting for their master's comprehensive examinations during the final quarter of residence. Students on Filing Fee have to pay for their own health insurance. Only one quarter of Filing Fee is allowed. The application is on R'Grad. The deadlines for filing fee are as follows:

- September 1 for Fall Quarter
- December 1 for Winter Quarter
- March 1 for Spring Quarter
- June 1 for Summer Quarter

Report on Final Examinations for the Degree of Doctor of Philosophy (Form 5)

To be filed upon completion of Dissertation.

The SSA in the CNAS Student Affairs Center will prepare this form in advance of the final defense.

Appendix 2. Courses for Graduate Programs in Plant Pathology

Students with undergraduate coursework in most of the following areas will be well prepared for a graduate program in Plant Pathology: Biology, Chemistry (Organic and Biochemistry), Mathematics, Physics, Statistics, Genetics, Cell Biology, Botany, Plant Anatomy, Plant Physiology, Soils, Microbiology, Mycology, and Introductory Plant Pathology. If requirements have not been met, students may be required to take make-up courses concurrent with graduate studies, depending on their overall goals and program expectations.

CORE COURSES

(Required for all students unless granted a special waiver following a petition to GAC)

PLPA 210 Introduction to Plant Pathology	3 Units
PLPA 200 Fungal Diseases of Plants	4 Units
PLPA 206 Phytopathogens: Nematodes	3 Units
PLPA 207 Bacterial and Viral Diseases of Plants	2 Units
PLPA 234 Introduction to Mycology	5 Units
PLPA 265 Colloquium in Plant Pathology	3 Units

Courses Highly Recommended PLPA 230 Molecular Plant-Microbial Interactions

MUST ENROLL EACH QUARTER WHEN OFFERED (Fall and Winter):

PLPA 250 Seminar in Plant Pathology

1 Unit

All students are expected to present a seminar in PLPA 250 when called for. A typical seminar by year would be:

Year 1 – Topic of Choice

Year 2 – Thesis Proposal_Seminar

Year 3 – Topic of Choice

Year 4 – Thesis Progress

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Quarter	Course	Title	Units	Lecture Hrs/Wk	Lab Hrs/ Wk
Fall	PLPA 210	Introduction to Plant Pathology (10 wks)	3	3	0
Fall	Plpa 234	Introduction to Mycology (10 wks)	5	4	3
Fall	PLPA 250	Seminar in Plant Pathology	1	1	0
Winter	PLPA 207	Bacterial and Viral Diseases of Plants (10 wks)	3	2	3
Winter	PLPA 200	Fungal Diseases of Plants (10 wks)	3	2	3
Winter	PLPA250	Seminar in Plant Pathology	1	1	0
Spring	PLPA 206 (Odd Years)	Phytopathogens: Nematodes (10 wk)	2	1	3
Spring	PLPA 265	Colloquium in Plant Pathology (10 wks)	3	3	0
		TOTAL UNITS for YEAR 1 CORE	21		

ADDITIONAL PROPOSED PROGRAMS OF STUDY FOR THE Ph.D.:

Additional course suggestions for tracks in Mycology, Virology, Nematology, and Bacterial/Molecular Plant Pathology are shown on the following pages. These are only suggestions, and additional courses of study can be designed to suit the needs of the individual student.

BACTERIAL/MOLECULAR "TRACK" IN PH.D. PROGRAM

Students lacking ba BCH 110A, B BIOL 107A	ackground in biochemistry or molecular biology should General Biochemistry Molecular Biology (Lecture)	consider taking: (4+4 credits) (4)
Students are expect	cted to take the core courses:	(4+4+4+3)
All students shall ta PLPA 265	ake the following course: Principles of Plant Pathology	(3)
All students encour PLPA 230 PLPA 240	raged to select classes from the following: Molecular Plant-Microbial Interactions Field Plant Pathology	(3) (1)
Plant Related: BCH 183 BPSC 143 BPSC 237 BPSC 233 BPSC 231	Plant Biochemistry Plant Physiology Plant Cell Biology Plant Responses to the Abiotic Environment The Plant Genome	(3) (4) (4) (4) (4)
Microbe-Related: BIOL 221	Microbial Genetics	(4)
General: BIOL 201 GEN 240A CMDB 206	Molecular Biology Advances in Bioinformatics & Genomics Gene Silencing	(4) (4) (3)

NEMATOLOGY "TRACK" IN THE PH.D. PROGRAM

PLPA 134Biology of Fungi(4)PLPA 120Introduction to Plant Pathology(4)Students are expected to take the core courses:(4+4+4+3)Nematode-related courses:(4+4+4+3)Nematode-related courses:(3)NEM 159Biology of Nematodes(3)NEM 205Nematode Identification (1 Week Summer)(.1)PLPA 230Molecular Plant-Microbial Interactions(3)PLPA 246Diagnosis of Plant Disease(2)NEM 250Seminar in Nematology(1)Additional Courses of Possible Interest:PLPA 235Epidemiology of Plant DiseasePLPA 235Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)NICH 112Insect Systematics(2)
PLPA 120Introduction to Plant Pathology(4)Students are expected to take the core courses:(4+4+4+3)Nematode-related courses:(4+4+4+3)NEM 159Biology of Nematodes(3)NEM 205Nematode Identification (1 Week Summer)(.1)PLPA 230Molecular Plant-Microbial Interactions(3)PLPA 246Diagnosis of Plant Disease(2)NEM 250Seminar in Nematology(1)Additional Courses of Possible Interest:PLPA 235PLPA 235Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)NICH 247Expendention Proved till 2 and the post till 2 a
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NEM 159Biology of Nematodes(3)NEM 205Nematode Identification (1 Week Summer)(.1)PLPA 230Molecular Plant-Microbial Interactions(3)PLPA 246Diagnosis of Plant Disease(2)NEM 250Seminar in Nematology(1)Additional Courses of Possible Interest:Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)
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PLPA 230Molecular Plant-Microbial Interactions(3)PLPA 246Diagnosis of Plant Disease(2)NEM 250Seminar in Nematology(1)Additional Courses of Possible Interest:(1)PLPA 235Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)NEM 112Insect Systematics(2)
PLPA 246Diagnosis of Plant Disease(2)NEM 250Seminar in Nematology(1)Additional Courses of Possible Interest:(1)PLPA 235Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)DIOL 117ALaboration Damaker(2)
NEM 250Seminar in Nematology(1)Additional Courses of Possible Interest:PLPA 235Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)DIOL 117AMolecular Biology(1)
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PLPA 235Epidemiology of Plant Disease(4)BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)DIOL 117Laboration Data Line Control(1)
BIOL 107AMolecular Biology(4)BIOL/ENTM 112Insect Systematics(2)BIOL 117Insect Systematics(1)
BIOL/ENTM 112 Insect Systematics (2)
BIOL 11/ Introductory Population & community Ecology (4)
BIOL/ENTM 127 Insect Ecology (alternate to BIOL 117) (4)
BIOL 151 Invertebrate Zoology (5)
BIOL 157 Parasitology (5)
BPSC 150 Principles of Plant Breeding (4)
SWSC 134 Soil Conditions & Plant Growth (4)
SWSC 120 Soil Ecology (3)
SWSC 133 Environmental Microbiology (4)
SWSC 211 Microbiol Ecology (3)
Plant Related Courses:
BPSC 231 The Plant Genome (4)
BPSC 237 Plant Cell Biology (4)
BPSC 233 Plant Responses to the Abiotic Environment (4)
BPSC 236 Principles of Light Microscopy (4)
Insast Polated Courses
ENTM 124 Agricultural Entomology (5)
Biochem, Cell and Molecular, Genetics Courses:
BCH 182 Lab Recomb, DNA Techniques (4)
BCH 210 Biochem. of Macro-Molecules (3)
BIOL 200 Cell Biology (4)
BIOL 201 Molecular Biology (4)
BIOL 221 Microbial Genetics (4)

VIROLOGY "TRACK" IN THE PLANT PATHOLOGY PH.D. PROGRAM

Students in this track should have an above-average understanding of the nature and role of nucleic acids and proteins in cell biology. Familiarity with recombinant DNA techniques will be beneficial.

Students with deficiencie	es may consider taking:	
PLPA 123	ComparativeVirology	(4)
-	Introduction to Plant Pathology	(4)
BIOL 107A	Molecular Biology	(4)
Students are expected to	take the core courses:	(4+4+4+3)
And are strongly encour	aged to also take:	
	Molecular Plant Virology	(3)
	Molecular Plant-Microbial Interactions	(3)
	Field Dept Dethology	(3)
	Diagnosis of Plant Disease	(1)
	Diagnosis of Plant Disease	(2)
PLPA 265	Principles of Plant Pathology	(3)
Additional courses of inte	erest include:	
BPSC 132	Plant Anatomy	(5)
BPSC 135	Plant Cell Biology	(3)
PDC 1/2	Plant Divisiology	(3)
DF3C 143	Principles of Diget Dreading	(4)
BPSC 150	Principles of Plant Breeding	(4)
BPSC 153	Plant Genomics and Biotechnology	(4)
ENTM 100	General Entomology	(4)
BCH 183	Plant Biochemistry	(3)
BCH 110	General Biochemistry	(4+4+4)
BIOL 109	Lab in Cell & Molecular Biology	(5)
BIOL 121	Microbiology	(3+3)
BIOL 128	Immunology	(3)
PI PA 134	Biology of Fungi	(4)
PI PA 235	Enidemiology of Plant Disease	(4)
PLPA 221	Chemical Control of Plant Disease	(3)
		(-)
Plant Related Courses:		
BPSC 231	The Plant Genome	(4)
BPSC 233	Plant Responses to the Abiotic Environment	nt (4)
BPSC 236	Light Microscopy	(4)
BPSC 237	Plant Cell Biology	(4)
Incast Delated Courses		
Insect Related Courses:		
ENTM 124	AgriculturalEntomology	(5)
Biochem, Cell and Moleci	ular. Genetics Courses:	
BCH 182	Lab Recomb, DNA Techniques	(4)
BCH 210	Biochem of Macro-Molecules	(3)
BIOL 200	Cell Biology	(4)
BIOL 201	Molecular Biology	(1)
	Microhial Constics	(ד) (A)
	Cono Silonging	(ד) (2)
	Gene Silencing	(3)

MYCOLOGY "TRACK" IN THE PLANT PATHOLOGY PH.D. PROGRAM

Students with deficiencies may consider taking:

PLPA120 STAT 120 AB	Introduction to Plant Pathology Experimental Techniques for Biologists	(4) (4+4)
Students are exp	ected to take the core courses:	(4+4+4+3)
PI PA 240	Field Plant Pathology	(1)
PLPA 220 AB	Morphology and Taxonomy Fungi	(4+4)
PLPA 245	Field Mycology	(1)
PLPA 246	Diagnosis of Plant Diseases	(2)
PLPA 265	A Colloquium on the Principles	(3)
	of Plant Pathology	
PLPA 230	Molecular Plant-Microbial Interactions	(3)

The following are strongly recommended courses. Students should take as many of these enrichment courses as their time, research project, and Advisor will allow. At least half of these courses should be taken to properly prepare a student to complete in the specialized areas of mycology study.

PLPA 221	Chemical Control of Plant Diseases	(3)
PLPA 230	Molecular Plant-Microbial Interactions	(3)
PLPA 235	Epidemiology of Plant Diseases	(4)
PLPA 245	Field Mycology	(1)
PLPA 246	Diagnosis of Plant Diseases	(2)
PLPA 265	A Colloquium on the Principles of Plant	
	Pathology	(3)
SWSC 133	Environmental Microbiology	(5)
SWSC 134	Soil Conditions and Plant Growth	(4)
SWSC 211	Microbial Ecology	(3)

Appendix 4. Contacts in Plant Pathology

NPPS Administrative Staff

Name	Title	Office	Campus Number
<u>Cheryl Gerry</u>	Financial & Administrative Officer	1425 Boyce Hall	951-827- 3814
Debbie Van Zanten	Financial Operations Manager	1491 Boyce Hall	951-827- 3815
Emelyn Lutzker	HR Generalist	College Bldg. North	951-827- 4228
Jeasin Khanam	Financial Analyst	1481 Boyce Hall	951-827- 4233
Margarita Flores	Administrative Asst/Event Coordinator	1447 Boyce Hall	951-827- 3598
Joann Braga	Purchasing/Travel Assistant	1463 Boyce Hall	951-827- 7259
Christine Morgando	Financial Analyst	1481 Boyce Hall	951-827- 3048
Nancy Ferguson	Purchasing/Travel Supervisor	1463 Boyce Hall	951-827- 4222
Sarah Acrey	PurchasingAssistant	1463 Boyce Hall	951-827- 3816
Oswaldo Osuna	Enrollment Management	2316 Webber Hall	951-827- 4737
Valerie Schulte	Financial Analyst	1481 Boyce Hall	951-827- 6994
Laura McGeehan	Student Services Advisor	1140C Batchelor Hall	951-827- 5688

Appendix 5. Departmental Policy on Dishonesty and Scientific Misconduct

Listed below are the policies of UCR and the Graduate Program in Plant Pathology concerning:

INTOLERANCE OF ACADEMIC DISHONESTY AND SCIENTIFIC MISCONDUCT

1. ACADEMIC DISHONESTY

The faculty of the University of California, Riverside, believe that the vast majority of our students maintain high standards of academic honesty. However, occasional incidents of academic dishonesty do occur. Many such acts are committed through ignorance. Often, a student accused of cheating will vehemently deny the charge, claiming that he/she did not know the act violated established policy. The following statement is intended to clarify what constitutes academic dishonesty and to describe the procedures and consequences if a student is accused of and found guilty of breaking the rules that apply to all UC Riverside students. At UCR, academic dishonesty is a serious offense and will not be tolerated.

1a. The policy

University of California, Policies applying to Campus Activities, Organizations, and Students, Section 102.01 (1996): Academic dishonesty requiring discipline is defined as "All forms of academic misconduct, including but not limited to, cheating, fabrication, plagiarism, or facilitating academic dishonesty as may be further specified in campus regulations." (The complete policy is published each quarter in the Schedule of Classes.)

1b. Academic dishonesty defined

<u>CHEATING:</u> It is cheating to copy from another student's examination, quiz, laboratory work, or homework assignment. The use of pre-prepared notes or other resources, in any form, during an examination, unless such use is expressly authorized by the instructor, also constitutes cheating. If a student knowingly allows someone else to copy from their homework, laboratory work, or examination, they are in violation of section 102.01. Revising a work after its final evaluation and representing the revised version as being the original work is cheating. Forging or otherwise unauthorized changing of an earned grade is also academically dishonest. Arranging for someone else to take an examination under your identification also constitutes an act of cheating. In this last instance, both parties are liable.

<u>PLAGIARISM:</u> According to Webster's Dictionary, plagiarism is the act of stealing and passing off as one's own the ideas or words of another--without properly referencing the original source. Please note that the faculty will pay attention not to whether you meant to plagiarize, but whether you did plagiarize. Additionally, submitting the same paper twice or fulfilling the requirements of two subjects with one paper is academically dishonest. In short, one can plagiarize oneself and be sanctioned for the violation. You may use ideas and words from other sources, but you must document their use with citations, usually in the form of footnotes, attributed quotations, literature cited, etc.

For example, consider the following quote from a hypothetical research paper by Dr. Smith in the journal Phytopathology in 1999:

"Our studies show that conidia can sense the chemical composition of the infection court."

Here are appropriate ways of using this information in a paper:

According to Smith (1999), conidia recognize chemicals within the infection court. (There are no quotes used here because the words are paraphrased, not simply repeated.)

OR

Conidia can sense chemicals on leaf surfaces, such as in the infection court (Smith, 1999).

OR

Smith (1999) states that "...conidia can sense the chemical composition of the infection court."

(Quotes are required when you cite something word for word. However, you should avoid relying on direct quotes in your papers; paraphrasing with an appropriate citation is preferable).

<u>UNAUTHORIZED COLLABORATION:</u> Collaboration occurs when a student works with other students to study, do lab work, review books or develop a presentation or report. Students must receive very clear permission from the instructor to participate in collaborations. Unauthorized collaboration is an example of an academically dishonest act. What one instructor may view as a collaboration may be seen as cheating by another. The important thing to note is that if the limits of collaboration are not clear, it is the student's responsibility to ask the instructor for very clear and specific direction.

<u>MANUFACTURE OF DATA</u>: It is academically dishonest to manufacture or deliberately alter data submitted in connection with laboratory reports, term papers, thesis research, publications, other written material, etc.

1c. Procedures and sanctions in regard to academic dishonesty

The sanctions for violation of student code 102.01 can include obtaining a reduced or failing grade in a course, temporary suspension, or expulsion from the University. In cases where dishonesty brings into doubt the reliability of thesis research, research assistantships or fellowships may be terminated.

The above information is not designed to threaten or intimidate the student. Rather, it is presented to inform the individual of the consequences. The important thing to remember is that if there is any doubt in one's mind that an act is in violation of the above policies, then the prudent response would be not to do the act.

2. SCIENTIFIC MISCONDUCT

(portions adapted from the policy statements of the University of Maryland, United Kingdom Research Councils and "Misconduct in Science" by V. Hammer).

2a. Introduction

Integrity in research and scholarly activities is the responsibility of the entire academic community. Scholars work in an environment in which there is an important sense of trust. Published material is assumed to have been obtained during the author's investigations. Falsification or fabrication of such data is intolerable. Each scientist, and the University, is responsible for promoting practices that discourage scientific misconduct.

All scientists, including graduate students, share responsibility for developing and maintaining standards to assure the highest ethical conduct of research and detection of abuse of these standards. Fraud or misconduct in carrying out academic activities undermines the integrity of the educational system and the scientific enterprise, and erodes the public trust in the university community to conduct research and communicate results using the highest standards and ethical practices. Consequently, misconduct in scholarly work by members of the department or University is a breach of their employment contract and will not be tolerated.

2b. Definition of scientific misconduct.

In general terms, scientific misconduct can be recognized to cover two broad categories, the distinction being in terms of the focus of the dishonesty. Thus, the first arises where there is fabrication or falsification of the research results; the second arises where there is plagiarism, misquoting or other misappropriation of the work of other researchers. Colluding in or concealing the misconduct of others is also misconduct. Honest errors do not constitute scientific misconduct.

In other words, scientific misconduct involves any form of behavior which entails an act of deception whereby one's work or the work of others is misrepresented, and includes fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting or reporting research. Other terms such as research fraud, scholarly misconduct or research misconduct, are subsumed within the term scientific misconduct as defined in the following specific examples:

<u>Falsification of data:</u> Ranging from fabrication to deceptive selective reporting of findings and omission of conflicting data, or willful suppression and/or distortion of data.

<u>Plagiarism:</u> The appropriation of the language, ideas, or thoughts of another and representation of them as one's own original work.

<u>Improprieties of authorship:</u> Improper assignment of credit, such as excluding others; misrepresentation of the same material as original in more than one publication; inclusion of individuals as authors who have not made a definite contribution to the work published; or submission of multi-authored publications without the concurrence of all authors.

<u>Misappropriation of the ideas of others:</u> An important aspect of scholarly activity is the exchange of ideas of ideas among colleagues. New ideas gleaned from such exchanges can lead to important discoveries. Scholars also acquire novel ideas during the process of reviewing grant applications and manuscripts. However, improper use of such information could constitute fraud. Wholesale appropriation of such material constitutes scientific misconduct.

<u>Violation of generally accepted research practices:</u> Serious deviation from accepted practices in proposing or carrying out research, improper manipulation of experiments to obtain biased results, deceptive statistical or analytical manipulations, or improper reporting of results.

<u>Failure to Comply with governmental and Institutional Requirements Affecting</u> <u>Research:</u> These include but are not limited to serious or substantial, repeated, willful violations involving the use of funds, care of animals, human subjects, drugs, recombinant products, new devices, or radioactive, biologic or chemical materials.

<u>Other miscellaneous inappropriate Behavior:</u> These include: inappropriate accusation of misconduct; withholding or destruction of information relevant to a claim of misconduct, or retaliation against persons involved in the allegation or investigation; deliberate misrepresentation of qualifications or accomplishments to advance the research program to obtain external funding, or other professional advancement; and misappropriation of funds or resources for personal gain.

2c. Scientific negligence versus scientific misconduct.

While scientific misconduct as defined above is a serious (and often punishable) breach of accepted practices, all scientists must be on guard against being intellectually negligent. This might be manifested in paying inadequate attention to negative results, or not performing enough controls. A lack of rigor in the scientific method, or carelessness in interpreting data, can result in the scientist (and eventually the public) being deceived. In such cases, the scientist likely did not set out from the beginning with the intent to defraud but instead shows that he/she has human faults. Such a trait may be considered by many to be inappropriate for a scientist to exhibit! Indeed, negligent, careless, sloppy, and reckless work is just as much a violation of moral duty as fraud. The potentially disastrous effects for science and society that result from incorrect information are the same regardless of the intentions of the author. Perhaps most troubling is the damage inflicted upon the reputation of science: if the public cann ot trust scientists--who will fund scientific research?

2d. What is your code of scientific ethics?

Some organizations have established a "code of ethics." These not only address some of the aspects of misbehavior mentioned above, but also the positive attributes of ethical scientific behavior. For example, the Agricultural Research Service of the USDA has the following code:

- I dedicate myself to the pursuit and promotion of beneficial scientific investigation, consistent with the mission of the Agricultural Research Service.

- I will never hinder the beneficial research of others.

- I will conduct, discuss, manage, judge and report science honestly, thoroughly, and without conflict of interest.

- I will encourage constructive critique of my personal science and that of my colleagues, in a manner that fosters harmony and quality amid scientific debate.

- I recognize past and present contributors to my science and will not accept unwarranted credit for the accomplishment of others.

- I will maintain and improve my professional skills and be a mentor to others.

- I will ensure safety and humane treatment of human and animal subjects and will prevent abuse of research resources entrusted to me.

What is your personal code?

Appendix 6. Departmental Forms

PLPA ENROLLED STUDENT TRANSCRIPT EVALUATION

NAME:		ADMISSIONDATE:	
LOCALADDRESS			
PHONE #:	LAB ROOM #:	LAB PHONE #:	
MAJORPROFESSOR:			
ROTATION 1:	ROTATION 2:	ROTATION 3:	

CORE COURSES TO BE TAKEN	QUARTER
PLPA 200 – Fungal Diseases of Plants (4)	
PLPA 203 – Bacterial Diseases of Plants (4)	
PLPA 203 – Bacterial Diseases of Plants (4)	
PLPA 204 – Viral Diseases of Plants (4)	
PLPA 206 – Nematode Diseases of Plants (3)	
PLPA 250 – Seminar in Plant Pathology (1)	
MUST ENROLL EACH QUARTER	

HIGHLY RECOMMENDED COURSES

PLPA 231 – Physiology of Plant Diseases

PLPA 265 – A Colloquium on the Principals of Plant Pathology

**In addition to the core courses students must also pick a track and follow the specific curriculum as outlined in the attached forms.

COURSE

This form should be filled out by the student and provided to the Graduate Affairs Committee for review. The Graduate Advisor for Enrolled Students should be notified of any changes made after GAC approval.

Student name: ______ Major professor (if known):

Date:

Proposed	<u>curriculum pl</u>	an			
YEAR:					
FALL	UNITS	WINTER	UNITS	SPRING	UNITS
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	
YEAR:				CODING	
FALL	UNITS	WINTER	UNITS	SPRING	UNITS
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	
YEAR:					
FALL	UNITS	WINTER	UNITS	SPRING	UNITS
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	
PLPA		PLPA		PLPA	

Comments/notes at the start of the first year

Suggestions:

Approved by (grad. advisor name):

Date:

Comments/notes at the start of the second year

Members of Guidance Committee (the major professor and two other faculty):

Suggestions:

Approved by (grad. advisor name):

Date:

Other notes by the Graduate Affairs Committee:

PLANTPATHOLOGY ADVISORY COMMITTEE ASSIGNMENT

STUDENT:

MEMBERS OF ADVISORY COMMITTEE:

Faculty Name, Chair (Major Prof.)	Date
Faculty Name	Date
Faculty Name	Date

PLANT PATHOLOGY QUALIFYING EXAM COMMITTEE NOMINATION

SubmittoStudentServicesAdvisor

STUDENT:

MEMBERS OF QUALIFYING EXAM COMMITTEE:

Please propose at least 2 alternates in addition to the 5 primary members.

Faculty Name, Committee Chair	Date
Faculty Name, Committee Member	Date
Faculty Name, Committee Member	Date
Faculty Name, Committee Member	Date
Faculty Name & Department, Outside Committee Member	Date
Alternate #1	
Alternate #2	
PROPOSED DATES OF WRITTEN EXAM:	
PROPOSED DATE OF ORAL EXAM:	

TIME AND LOCATION OF EXAM:

ANNUAL REVIEW OF GRADUATE STUDENT PROGRESS Department of Microbiology and Plant Pathology

Name of stu Program:	ident: M.S.	Ph.D.	Date prepared: Quarter entered program:		
Qualifying	exam date(s): V	VRITTEN	ORAL		
Dissertation title (<i>working title</i>):					
Anticipated	Exit Quarter:				

ACADEMIC PROGRESS

REQUIRED COURSE WORK (Please review requirement worksheet and comment if you have completed core courses and proposed course work to be taken):

Have deficiencies been satisfied?	Yes No
If no, please indicate which deficiencies	remain and when they will be met:

RESEARCH (Please briefly describe your research accomplishments this year and indicate goals for next year):

ACCOMPLISHMENTS (Please indicate any special accomplishments, meetings attended, awards, publications, etc. received by you this year):

SUGGESTIONS/COMMENTS:		
Major Professor Name:	Signature:	
Committee Member Name:	Signature:	
Committee Member Name:	Signature:	
	0	
Student Name:	Signature:	
Jraduate Advisor Name:	Signature:	

Please submit the completed form to Laura McGeehan in 1140 Batchelor Hall. Deadline: 3rd Friday of July

Appendix 7. GSAC Handbook

CNAS GRADUATE STUDENT AFFAIRS CENTER

(1140 Batchelor Hall)

Housed in the College of Natural & Agricultural Sciences, the CNAS Graduate Student Affairs Center supports the majority of the graduate programs in the college. We assist you with all aspects of completing your graduate program (class registration, program requirements, Graduate Division policies, and fellowship and employment matters (TA/GSR)). We will often be your first stop when you need help or are just looking for a good listener. We work with Faculty Graduate Advisors and Major Professors to ensure your success. You usually see the staff member who supports your graduate program, but feel free to contact any Center staff when your Student Services Advisor is unavailable.

CENTER STAFF MEMBERS

<u>Kathy Redd</u>, GSAC & EMC Director and Student Services Advisor – oversees the operation of the Center and is the primary contact for the **Entomology** graduate program and **Staff Support for TA appointments in the Life Sciences**.

E-mail <u>kathy.redd@ucr.edu</u> Phone: 951-827-5621

Dawn Loyola, Director of Graduate Student Advising and Student Services Advisor – is the primary contact for the Evolution, Ecology, and Organismal Biology and The Joint Doctoral Program in Evolutionary Biology (SDSU/UCR) graduate programs. E-mail dawn.loyola@ucr.edu Phone: 951-827-4116

<u>Margarita Roman</u>, Student Services Advisor - is the primary contact for the **Neuroscience**, Statistics, and Applied Statistics graduate programs. E-mail <u>margarita.roman@ucr.edu</u> Phone: 951-827-4716

<u>John Herring</u>, <u>Student Services Advisor</u> - is the primary contact for the **Mathematics** and **Geological Sciences** graduate programs. E-mail john.herring@ucr.edu Phone: 951-827-2441

<u>Julio Sosa, Student Services Advisor</u> - is the primary contact for the **Cell, Molecular, and Development Biology, Genetics, Genomics and Bioinformatics** and **Biochemistry** graduate programs. E-mail julio.sosa@ucr.edu Phone: 951-827-7378

Laura McGeehan, Student Services Advisor – is the primary contact for the Microbiology, Plant Biology and Plant Pathology graduate programs. E-mail laura.mcgeehan@ucr.edu Phone: 951-827-5688

Antonio Knox, Student Services Advisor for Environmental Science and Environmental Toxicology graduate programs. E-mail: <u>Antonio.knox@ucr.edu</u> Phone: 951-827-5688

GRADUATE DIVISION REQUIREMENTS

For information on specific Graduate Division requirements, please refer to the Graduate Studies section of the University of California, Riverside General Catalog; and to the Graduate Division's web site. That address is: <u>http://graduate.ucr.edu/current_students.html</u>

GRADUATE STUDENT ASSOCIATION

All graduate students are automatically members of the Graduate Student Association (GSA), which seeks to represent their views and promote their interests with the faculty and administration, both at the campus level and system wide. They are responsible for negotiating and reviewing healthcare insurance coverage. Their Grievance Mediation Officer acts as an advocate on grievance matters. It also administers the Minigrant Program, to provide travel grants to graduate students who represent GSA at professional conferences. For a more detailed description of GSA activities and services, call (951) 827-3740 or visit their website at http://www.gsa.ucr.edu/

UCR GRADUATE COMMUNITY COURSE/ILEARN

You will be enrolled in the UCR Graduate Community course through iLearn. This course is used to post announcements regarding funding opportunities, campus workshops and events pertinent to graduate students. The discussions boards are also available, including a "student exchange" where you can post items for sale or rooms for rent, etc. <u>www.ilearn.ucr.edu</u>

R'MAIL ACCOUNTS

When you enroll at UCR you are automatically assigned a UCR R'Mail account on the Student server. Along with your account you will also receive an electronic generated login name. You cannot change your login name; it will stay the same throughout your time at UCR. However, you may choose to <u>change your password</u> at your own discretion. (Changes in your password will not affect your email address nor will they alter the URL of your home page.) Your initial password is your Permanent PIN number. If you forget it, you can go to the Registrar's Office. However, we strongly recommend that you <u>change your password</u> as soon as possible. Occasionally, passwords are stolen and the amount of damage that can be done from a stolen password is considerable. If your password is your Permanent PIN number, the amount of damage increases greatly, because your academic information and financial aid records may also be accessed.

The University requires that you read your UCR web mail account regularly. The University and Graduate Student Services Advisors use e-mail to remind students of upcoming deadlines and to pass on important messages. The UCR e-mail address is considered the official means of contact.

MAILBOXES

Ask your Student Services Advisor about the location of your mailbox. Find out now where it is and check it on a regular basis.

COMPUTER ACCESS AND OFFICE SPACE

Some programs provide offices for their PhD-level graduate students, some only desk space in a lab. If your program does not have a computer room, there are computer labs on campus that you are free to use. **Find out now what's available to you.**

LABORATORY SAFETY TRAINING

As an employee of the University, you are required to attend Lab Safety Training provided by Environmental Health & Safety (EH&S). Please enroll in a session via their online website: <u>http://www.ehs.ucr.edu/</u>. If you have any questions or problems enrolling, please contact the EH&S office at 951-827-5528. Please attend this training as soon as possible. Some graduate students will need to attend additional training depending on their research project. It is very important that you maintain your own records of any training you take in addition to providing proof to your lab manager or faculty member. In the past, students have had to repeat training if they did not have their own proof that they completed it due to unreliable computer records.

UCR IDENTIFICATION CARD

The UCR Card is a multi-functional Campus ID card. It is the Official photo ID of UCR and it provides you with Library privileges as well as access to the Sports Recreation Complex.

The cost of your card is billed directly to your student account. For information on how to obtain the card, as well as optional card services, please visit: <u>http://www.ucrcard.ucr.edu/</u>

ESTABLISHING CALIFORNIA RESIDENCY

Domestic California Non-resident students must establish California residency by the beginning of the second year of study. Students should start planning for this as soon as they arrive. For more information, please go to the Graduate Division website: <u>http://graduate.ucr.edu/residency_status.html</u>

ENROLLMENT

It is the student's responsibility to initially enroll in courses and to confirm course enrollment. Failure to enroll by scheduled deadlines may result in the lapse of student status or delay financial aid. The R'Web system is the web service for enrolling in courses. Using R'Web, students can enroll in classes, confirm course enrollment, view grades, check their financial aid, billing, degree progress, view their Student ID, change their address or PERM PIN number, update privacy restrictions, and get help. R'Web is accessed at <u>http://rweb.ucr.edu/</u>.

THE PERMANENT PERSONAL IDENTIFICATION NUMBER

Your **PERM PIN** is a permanent six-digit number that is set by the Office of the Registrar once a student is admitted to the university. Your Perm Pin and Student ID number are located on your Admissions Confirmation Letter (sent to you via e-mail).

CHANGE OF ADDRESS

Please keep your local address and phone number current. Let your Graduate Student Affairs Officer know when you move. You must update your addresses (local, billing, next of kin) on R'Web.

INFORMATION FOR TEACHING ASSISTANTS (TAs)

Teaching Assistant Development Program

UCR has a long history as a distinguished teaching campus and regards Teaching Assistant (TA) training as a crucial part of graduate instruction. TA orientation is required of TAs in all departments. It is offered every fall during the first week of the quarter, as well as at the beginning of the winter quarter. Focus workshops are required of all Teaching Assistants who scored a 4.0 or below on any single question on their Teaching Evaluations. Students who score low on their "overall effectiveness as a TA" question must be observed in class by a Mentor TA and prepare an Action Plan for improvement. Students who score low on their English language skills must attend a communication workshop and schedule six half hour sessions to use language software in the

TADP Office. Registration is available on the TADP home page beginning Monday of the first full week of classes for the current quarter.

TADP provides services to the more experienced TA as well, including a teaching resource library, teaching portfolio development and assessment consultations, seminars on professional development, and the University Teaching Certificate Program. Contact your department or TADP (951-827-3386, tadp@ucr.edu) for further information on training requirements and upcoming seminars. You may also visit their website: http://tadp.ucr.edu/

The SPEAK EXAM (TOEFL Academic Speaking Test)

To be appointed a TA, any student **whose native language is not English** must pass an English proficiency exam. This includes not only international students but also **any** student whose first language is not English. The SPEAK exam is scheduled by the International Education Programs in University Extension approximately two weeks before the beginning of every quarter.

Those who score a conditional pass can be appointed as a TA but are required to participate in the appropriate English language classes at the Extension Center and retake the test. Individuals in this range may be appointed as TAs for up to two quarters on a probationary basis with the approval of the Graduate Dean. For those students within the probationary range, a determination of their continuing eligibility to serve as TAs will be made by the Graduate Dean on the basis of:

- Departmental recommendation, including an assessment of the student's academic ability;
- Student teaching evaluations;
- Other evidence of commitment to/performance in teaching (e.g., faculty evaluations or statements of support, videotapes);
- Evidence of a good-faith effort to improve English skills; and Relative proximity to the level of competence represented by a clear pass

GRADUATE STUDENT FINANCIAL ASSISTANCE

Funding Sources

Graduate Students are supported from a variety of sources. Here is information on the various types of funding and definitions of the commonly-used acronyms:

Graduate Division Stipend: Usually awarded as part of a larger fellowship package, these dollars go directly from Graduate Division to the student through the Financial Aid System. The student receives a stipend payment at the beginning of the quarter.

Graduate Student Researcher (GSR): An employment title for graduate students conducting research (either independent or directed). Students may not be appointed at more than 49% during the academic year. During academic breaks and the summer, a student may be employed up to 100%.

GSR appointments at 25% or more during the academic year are entitled to GSHIP and PFR (see below). Financial support for GSR employees is provided by faculty extramural grants or departmental general funds.

Students are paid in arrears (just like other university employees) and receive a monthly check after each month of work. For example, a student who begins work in fall quarter does not receive a check until November 1.

Teaching Assistant (TA): Also known as **Academic Student Employee (ASE)**. This employment title is for graduate students who are teaching part of a course (normally labs or discussion sections) under the guidance of a faculty member/instructor. Students may not be appointed at more than 50% during the academic year. If they are appointed at 25% or more time

during an academic quarter, they are entitled to GSHIP and PFR (see below). There are many rules that are associated with this title now due to the employee contract. See the United Auto Workers Union Contract for more information. TA funds are distributed to the Departments by the CNAS Dean's Office. Students are paid in arrears (just like other university employees). Students are paid in arrears (just like other university employees) and receive a monthly check after each month of work. For example, a student who begins work in fall quarter does not receive a check until November 1.

Partial Fee Remission (PFR): Students who are appointed at 25% or more time during an academic quarter as a GSR or TA are entitled to PFR. This entitlement pays part (but not all) of the students' mandatory university fees. he Graduate Student Services Advisor provides Graduate Division with the names of students who are eligible for this entitlement before the student bills are generated. If an award is placed on the system after bills are generated, the student's bill will not reflect the correct amount until after the system updates.

Graduate Student Health Insurance (GSHIP): Students who are appointed at 25% or more time during an academic quarter as a GSR or TA are entitled to have their GSHIP fees paid for them. The Graduate Student Services Advisor provides Graduate Division with a list of the students who are eligible for this entitlement before the student bills are generated. The actual dollar amount of GSHIP changes as the insurance prices change from year to year. Students who have private health insurance comparable to the University's coverage can apply for waivers of the GSHIP fees. If a student has comparable health insurance coverage they may apply for waiver of the GSHIP premium by filing the appropriate paperwork with the Health Center. Deadline dates for petitioning for exemption from GSHIP are firm. Contact the Student Health Insurance coordinator at (951) 827-5683 or (951) 827-3031 for information. Please be aware that if a student is receiving any form of financial support (excluding loans), the amount of the health insurance is returned to that funding source, not the student.

Non-Resident Tuition Remission (NRT or NRTR): Non-residents of California (either Domestic or International) who are appointed at 45% or more as a GSR are entitled to have their Non-Resident Tuition paid for them.

International Students cannot establish residency and will owe Non-Resident Tuition for their entire student careers. However, when a student Advances to Candidacy, the Non-Resident Tuition is waived for a period of nine quarters, not including summer quarters.

Domestic non-resident students must establish California residency by the beginning of the second year of study. You must petition in person at the Office of the Registrar for a change of classification from nonresident to resident status. All changes of status MUST be initiated before the first day of classes for the term for which you intend to be classified as a resident. Students planning to file for residence status after their first year should talk with the Residence Deputy well before the appropriate residence determination date, preferably during their first few weeks in California.

Fee Differential: The fee differential is the left-over university mandatory fee amount for a student with a PFR and GSHIP and NRTR entitlements. This covers the Graduate Student Association Fee, Recreation Center Fee, and other miscellaneous fees. This dollar amount fluctuates as these fees change. Most students are required to pay this.

Departmental Grant In Aid (DGIA): Departments or individual faculty members with unrestricted funds (many federal grants will not allow payment of student fees) can grant fellowship-like awards to individual students. This is most often used to pay the student's Fee Differential. The Graduate Student Services Advisor provides information to Graduate Division on the students who are to receive these awards, indicating the account and fund information. Graduate Division then processes the award through the Financial Aid System.

CAMPUS FUNDING

UCR Graduate Division Fellowships

Dissertation-Year Fellowships (DYP)

The Dissertation-Year Fellowship Program provides financial support during the final year of dissertation work. Recipients must demonstrate high potential, promise and the desire for an academic career. Faculty mentors assist fellows in acquiring skills necessary to become candidates for faculty positions at major universities. Support is also provided to enable fellows to present their research at other UC and CSU (California State University) campuses.

Graduate Research Mentorship Programs (GRMP)

The Graduate Research Mentorship Programs (GRMP) awards are intended to enhance the mentoring of doctoral students during their third, fourth, or fifth years of graduate study. Recipients are eligible for one, two, or three quarters of support to conduct their research (includes summers).

More information about these awards is available at:

http://graduate.ucr.edu/fin_aid.html

RESEARCH GRANTS

Dissertation Research Grants

Dissertation Research Grants provide funds to doctoral candidates for research expenses associated with the dissertation. Applicants must be advanced to candidacy and plan to be registered during the period of the award. These funds may not be used for preparing the dissertation copy or as a stipend for personal support.

Deadlines to apply for Dissertation Research Grant funding are usually in October, January, and April. The Graduate Division sends announcements by email with deadlines and application instructions.

Graduate Student Association Mini-grants

Graduate Student Association Mini-grants help to meet the financial needs of students who have been invited to present scholarly papers or posters at regional and national professional conferences. The program is administered by the Graduate Student Association and requires that departments agree to provide matching funds.

OTHER SOURCES OF FUNDING

- * California Student Aid Commission Home Page: <u>http://www.csac.ca.gov/</u>
 * Fellowship Office National Research Council: http://www.nationalacademies.org/index.html
- * Financial Aid Information Page: <u>http://www.finaid.org</u> (check FASTWEB)
- * National Science Foundation: <u>http://www.nsf.gov/</u>
- * U.S. Department of Education Student Guide, Financial Aid: http://www2.ed.gov/finaid/landing.jhtml
- * The Foundation Center's Home Page: <u>http://www.fdncenter.org/</u>

For more information contact Karen Smith at (<u>karen.smith@ucr.edu</u>) with the UCR Graduate Division.

Extramural Support

There are many opportunities for Graduate Students from outside funding sources from federal agencies and private foundations. UCR subscribes to several searchable databases listed on the Office of Research Affairs web site at www.ora.ucr.edu:

UCLA also offers a comprehensive database called GRAPES (Graduate and Post doctorate Extramural Support). The web address is

http://www.gdnet.ucla.edu/grpinst.htm

TAX INFORMATION FOR GRADUATE STUDENTS

Teaching Assistantships, Research Assistantships, and Fellowships are considered taxable income. Refer to the UCR Graduate Student Handbook for more information. Each year the Rivera Library and the Graduate Division have IRS publication materials available to students. International students should visit the International Education Center website for information about tax workshops and filing help.