# GRADUATE STUDENT HANDBOOK



Photograph by R. T. Bessin

# DEPARTMENT OF ENTOMOLOGY UNIVERSITY OF KENTUCKY

Revised 2005

# TABLE OF CONTENTS

INTRODUCTION	4
DESCRIPTION OF ENTOMOLOGY GRADUATE RESEARCH PROGRAMS	4
APPLICATION AND ADMISSION	
Application Procedure	5
Requirements for Admission	5
ASSISTANTSHIPS AND FELLOWSHIPS	
Options	6
Research Assistantships	6
Teaching Assistantships	
Fellowships	6
Application	6
Criteria for Assistantship Awards	7
Duties	
Enrollment Requirements	8
Duration	8
Review of Progress and Termination of Assistantships	9
ORGANIZATION AND ADMINISTRATION	
Graduate Faculty	10
Graduate Dean	
Director of Graduate Studies (DGS)	
Major Professor.	
Advisory Committee	
REQUIREMENTS FOR ADVANCED DEGREES	
General	11
Core Requirements	
Master of Science (Plan A)	
Master of Science (Plan B)	
Ph.D. Degree	
Residence	
Diagnostic interview	
Qualifying Examination	
Dissertation	
Presenting Dissertation and Final Examination	16

# **TABLE OF CONTENTS continued**

ACADEMIC PERFORMANCE, PROBATION AND TERMINATION	18
FACILITIES	19
PLACEMENT	19
CHECK SHEET  Master's Degree, Plan A  Master's Degree, Plan B  Ph.D. Degree	21
FORMS	
Departmental	
M.S. Advisory Committee Request (Plans A & B)	23
M.S. – Plan B Practicum Approval	23
Ph.D. Areas of Particular Expertise	23
Graduate School	

Available online at http://www.research.uky.edu/gs/gsforms.html

#### INTRODUCTION

This Graduate Program Handbook of the Department of Entomology is provided as guide to graduate students and faculty of the Department. The handbook summarizes the major rules and procedures of the Graduate School and describes specific policies of the Department of Entomology Graduate Program. The assistantship requirements and rules included in this Handbook apply to all students receiving assistantships from the Department. It should be emphasized that rules of The Graduate School must be satisfied and reference to the most current Graduate School Bulletin should be made whenever rules and policies are not clear. It is the responsibility of the student to become familiar with the rules of the Graduate School.

It is the responsibility of the Department to provide an atmosphere and environment conducive to learning, productive graduate research, and professional development. Resources and suitable facilities will be provided for thesis and dissertation research. Desk space will be provided when available and will be assigned on a seniority basis, with students receiving assistantships or fellowships having priority. Keys to appropriate office and laboratory facilities can be obtained from the key shop located in the Service Building (Peterson Building) by presenting a key card signed by the Department Chair. A mailbox is provided for each student in Room S-207. Students should check their mailboxes frequently. Students should establish an email account and a Novell Network account; they should add their e-mail address to the department's e-mail distribution list as soon as possible.

#### DESCRIPTION OF ENTOMOLOGY GRADUATE RESEARCH PROGRAMS

The Department of Entomology offers graduate work leading to the Master of Science (Plan A, requiring a thesis, and Plan B, non-thesis option) and the Doctor of Philosophy degrees. Certain faculty members also may participate in the Toxicology Graduate Program which offers the M.S. and Ph. D. degrees. Within the Department of Entomology itself, students can choose to conduct their research in a number of informal areas of specialization that include:

Integrated Pest Management Insect-Plant Interactions

Biological Control Insect Physiology

Extension Entomology Mathematical Modeling

Urban Entomology Medical Entomology

Insect Behavior Systematics

Insect Ecology Insect Pathology

Veterinary Entomology Forest Entomology

Molecular Biology Acarology

Evolution Population Genetics

The principal commodity areas studied among Department of Entomology faculty are corn, forage crops, forests, soybeans, stored products, vegetables, fruit, turfgrass and ornamental plants. Insects affecting human and animal health also are studied.

#### APPLICATION AND ADMISSION

## **Application Procedure**

Application forms can be obtained online or will be sent by mail upon request. The following items must be submitted directly to the Graduate School: official copies of transcripts, official copy of GRE scores, official copy of TOEFL scores (if applicable), application fee, and the University of Kentucky Graduate School Application form. The following items must be submitted directly to the Director of Graduate Studies, Department of Entomology, University of Kentucky, Lexington, KY 40546: Departmental Application form, unofficial copy of transcripts, and 3 letters of recommendation.

#### Requirements for Admission

The Graduate School has set requirements for admission as outlined in the Graduate School Bulletin, i.e., baccalaureate degree from a fully accredited institution, an overall gradepoint of 2.75 (undergraduate) and 3.0 (graduate) on a 4.0 scale, and official Graduate Record Examination (GRE) scores from the verbal, quantitative and analytical writing portions of the general examination. However, a graduate program may require a higher grade-point average and place other additional conditions on admission. Admission to the graduate program in Entomology is based on the recommendation of the Department of Entomology Graduate Program Committee. Minimal requirements include an overall undergraduate grade-point average of 3.0 and an overall graduate grade-point average of 3.25. Applicants whose native language is English must score at least 1050 on the combined verbal and quantitative portions of the Graduate Record Examination (GRE). Those whose native language is not English must have a Test of English as a Foreign Language (TOEFL) score of at least 550 (paper version) or 213 (computer version), plus a score of 550 on the Quantitative portion of the GRE. Three letters of recommendation are required by the Department for all applicants. Since the departmental admissions requirements exceed the minimal requirements of the Graduate School, admission to the Department virtually guarantees admission to the Graduate School. Admission to the graduate program in Entomology, however, does NOT automatically guarantee financial assistance to the student. These minimal requirements may be waived in exceptional cases if sufficient additional evidence is presented regarding the ability of the student to do graduate work.

#### ASSISTANTSHIPS AND FELLOWSHIPS

#### **Options**

- 1. <u>Research Assistantships</u> Research assistantships are competitive and are awarded on the basis of merit. They may be funded from College research funds or from grants. Research assistants will work 20 hours per week performing duties as assigned by their advisor. They are further expected to work additional hours as needed for their own research goals. See the section on Duties for more details.
  - Students awarded research assistantships do not pay tuition, provided they maintain a 3.0 GPA, but they are required to pay a "student recreation fee."
- 2. <u>Teaching Assistantships</u> Generally, teaching assistantships are not awarded in the Department of Entomology. Teaching assistantships at the University of Kentucky are awarded on a competitive basis and recipients are expected to assist in teaching, usually as laboratory instructors. Students recruited for teaching assistantships may subsequently be awarded a research assistantship but are usually expected to serve as a teaching assistant for several semesters.
- 3. <u>Fellowships</u> Fellowships are awarded through the Graduate School. They are highly competitive and are normally awarded to superior Students. Fellowships are available in many forms, including the following: Presidential Graduate Fellowships, Women in Under-represented Areas Fellowships, Lyman T. Johnson Fellowships, Otis A. Singletary and W. L. Matthews, Jr. Fellowships, Dissertation Year Fellowships, and Kentucky Opportunity Fellowships. The availability, eligibility requirements, nomination, and selection process and date of application vary, so the student is advised to make inquiry. If the fellowship stipend is not equivalent to a research assistantship stipend, the fellowship may be supplemented within the limits established by the Graduate School. The deadlines for fellowship applications vary; deadlines are available on the Graduate School's website.

In addition, the Dan C. Hutson Graduate Enrichment Fellowship is awarded to a graduate student enrolled in the College of Agriculture who has received his/her undergraduate education from Murray State University. The Department of Entomology also awards the J.G. Rodriguez Graduate Enrichment Fellowship for an outstanding entomology graduate student and the Kentucky Pest Control Association Tuition Fellowship.

# **Application**

Applicants are considered for assistantships/fellowships when applications for admission are reviewed. Ideally applications should be submitted prior to January 15 for students planning to enroll for the Fall Semester and prior to September 15 for those planning to enroll for Spring

Semester. Applications are received at any time, but late applicants will have a reduced chance of receiving financial aid.

# Criteria for Assistantship Awards

Evaluation for assistantships and fellowships is based on academic record, GRE scores, letters of recommendation, academic honors and awards, publications, and any other available information relevant to evaluating the academic potential of the student. Since the number of available assistantships is usually less than the number of qualified applicants, the requirements for assistantships normally exceed requirements for admission. Students having the best academic record and greatest potential for successfully completing graduate study are given highest priority for assistantship support; however, exceptions can be made for the following reasons:

- 1. Need for additional students in an area of specialization.
- 2. Availability of funds, particularly for assistantships supported by research grants.

#### **Duties**

Graduate Research Assistantships are awarded for financial support of the student while he/she is conducting research toward a Master's thesis or Doctoral dissertation. The thesis or dissertation is the student's own work; however, the research is almost always consistent with the long-range objective of the major professor's research program.

Research Assistants are half-time employees of the Department. This, means that a MINIMUM of 20 hours per week of work is required of those holding assistantships. In addition to this minimum, students will find they need to devote additional time to the completion of their own research and course work.

Research Assistants perform those duties assigned by their advisor to fulfill the 20 hours per week work requirement. These duties shall be related to the research goals of the advisor; often these duties will relate to the research goals of the student as well. However, from time to time, the advisor may request assistance in non-thesis research (related to the advisor's program) or participation in activities that enhance the student's educational experience. Students are strongly encouraged to discuss the requirements and expectations related to their assistantship with their advisor prior to accepting the award.

Students should note that successful research will almost always require more time than this 20 hour minimum. Thus, it is expected that students will devote themselves to classes (during the Fall and Spring semesters) and to their research IN ADDITION TO the duties required as a Research Assistant. The departmental philosophy is that commitment and dedication are essential characteristics of a good graduate student; that an assistantship should provide the student the opportunity to devote his/her full attention to study and graduate research; and that successful graduate study often demands evening and weekend work. An

effort is made to evaluate ambition, motivation, and commitment in awarding assistantships.

Fellowships are awarded to individuals to pursue full-time study toward an advanced degree. There are no specific duties associated with fellowships, nor are specific duties to be assigned to individuals holding fellowships. However, all graduate students are expected to devote a major portion of their time toward the requirements of their degree. Fellowships should be viewed as an opportunity to devote oneself full-time to research and course work.

With the exception of University approved holidays, time between semesters and summer school are not to be considered as time off for graduate students on research assistantships or fellowships. There is no schedule for accumulation of vacation days for graduate students. A reasonable amount of leave time may be negotiated between the student and Major Advisor.

## **Enrollment Requirements**

Master's students receiving assistantships or fellowships must be enrolled as full-time students (9 graduate credit hours) each Fall and Spring semester until all required courses are completed. If necessary, ENT 768 (Residence Credit for M.S. Degree) may be used in combination with formal courses to attain full-time status, but M.S. students in Entomology are not required to take ENT 768. **After all required courses are completed**, M.S. students should enroll in ENT 748 for zero credit; only the DGS can enroll students in ENT 748. Enrollment in ENT 748 for zero credit **does** maintain a student's full-time status, but requires no payment of tuition.

Doctoral students receiving assistantships or fellowships must be enrolled as full-time students (9 credit hours) each Fall and Spring semester until all required courses are completed and the pre-qualifying residency requirement is satisfied (2 years). They must register for two consecutive, full-time semesters of ENT 769 (Residency Credit for the Doctoral Degree) immediately following the Qualifying Examination. **After all required courses are completed**, Ph.D. students should enroll in ENT 749 for zero credit; only the DGS can enroll students in ENT 749. Enrollment in ENT 749 for zero credit **does** maintain a student's full-time status, but it requires no payment of tuition.

The Graduate School does not require recipients of assistantships or fellowships to register during the summer unless specific courses are taken. Further details on enrollment and residency requirements can be found in the online Graduate School Bulletin.

#### Duration

Fellowships are usually awarded for the academic year, the duration being established by the Graduate School, although most are annual competitive renewals. Graduate Research Assistantships are awarded on a 12-month basis subject to renewal providing the student is making satisfactory progress. The following rules apply for research assistantships.

1. Master of Science - Assistantships normally will terminate at the end of two years.

# 2. Ph.D. Degree

- a. From a baccalaureate degree without a Masters degree-Assistantships normally will terminate at the end of the fifth year.
- b. From a Masters degree Assistantships normally will terminate at the end of the third year.

Extension of assistantships beyond the normal termination date can be granted on a semester-by-semester basis if extenuating circumstances occur. The extension must be requested by the student, recommended by the M.S. or the Ph.D. Advisory Committee, and approved by the Director of Graduate Studies. The request must be accompanied by a report of progress and justification for extension.

# Review of Progress and Termination of Assistantships

Academic and research progress will be reviewed, at least, once a year by the Advisory Committee. Students who are placed on academic probation because of failure to meet the required 3.0 grade-point standing will automatically be placed on probation with respect to the assistantship. The assistantship will be terminated if the student is not removed from academic probation after one semester unless extenuating circumstances can be satisfactorily demonstrated to the Departmental Graduate Program Committee.

Students on academic probation and who are not official residents of Kentucky will forfeit their eligibility for out-of-state tuition scholarships. Full out-of-state tuition will be payable until the student is removed from academic probation.

Other reasons for terminating an assistantship prior to completion of degree requirements or prior to the normal termination date identified under "Duration" (see above) are:

- 1. Failure to make satisfactory research progress as determined by the Advisory Committee.
- 2. Failure of the Ph.D. Qualifying Examination.
- 3. Failure of the Final Examination for the Master's degree or the Ph.D. Degree.

Normally, termination of an assistantship is recommended by the Advisory Committee, reviewed by the Departmental Graduate Program Committee, and finally acted upon by the Director of Graduate Studies.

#### ORGANIZATION AND ADMINISTRATION

#### **Graduate Faculty**

The Graduate Faculty consists of the Dean of the Graduate School, Associate Deans of the Graduate School, and Full and Associate Graduate Faculty Members.

#### Graduate Dean

The Dean of the Graduate School is charged with the administration of the policies adopted by the Graduate Faculty and the University Senate relating to graduate studies.

### Director of Graduate Studies (DGS)

The Director of Graduate Studies is appointed by the Graduate Dean. He/she administers the rules of the Graduate School as they pertain to the graduate program of the department and serves as liaison between the Graduate Dean and the faculty and students of the program.

# Major Professor

A Major Professor is appointed by the DGS for each M.S. student. He/she advises the student on course work, chairs the M.S. Advisory Committee and serves as the Thesis Director. The DGS or a designee serves as advisor until a Major Professor is appointed.

A Major Professor for each Ph.D. student is appointed by the Graduate Dean on recommendation by the DGS. He/she assumes primary advisory functions for the student, chairs the Advisory Committee and serves as Dissertation Director. The DGS or a designee serves as advisor until a Major Professor is appointed.

### **Advisory Committee**

Each M.S.-level student's program is guided by a Major Professor and an Advisory Committee. The Advisory Committee is appointed by the DGS after receipt of the Advisory Committee form for the M.S. Degree. This should be done by the end of the first semester of the student's tenure for the M.S. degree (see attached copy of this form for the composition of this committee). The student and the Major Professor will present the proposed course work and, for Plan A students, the thesis research proposal to the Committee for suggestions. The Advisory Committee will meet at least once a year with the student. Prior to the Final Examination, the DGS will recommend to the Dean of the Graduate School the appointment of this Advisory Committee to serve as the Examination Committee.

Each doctoral student's program is guided by a Major Professor and an Advisory Committee. The Major Professor and Advisory Committee are appointed by the Graduate Dean after receipt of an Advisory Committee Request Form transmitted by the DGS. This should be done during the first semester of the student's tenure for the Ph.D. degree (see the attached copy

of this form for composition of this committee). The Advisory Committee provides advice to the student and specifically sets requirements (within Program, Graduate School, and University Regulations) which the student must meet in pursuit of the doctorate.

The Advisory Committee administers the Diagnostic Interview and Qualifying Examination, supervises the preparation of the dissertation, and administers the Final Examination.

The student must meet at least once a year with the Advisory Committee.

### REQUIREMENTS FOR ADVANCED DEGREES

Requirements for an advanced degree shall be no less than the minimum established by the Graduate School.

#### General

During their first year of graduate studies, M.S. (Plan A) and Ph.D. students are required to prepare a formal written research proposal encompassing a thorough literature review, clear statement of objectives, and materials and methods of the project. A research proposal seminar will be presented to the Department upon completion of the written research proposal. An exit seminar, usually presented during the last semester of the student's tenure, is required for M.S. (plans A and B) and Ph.D. students. August graduates will present their seminar in the preceding spring. M.S. students using the Plan B option will be required to provide a detailed outline of their practicum to their Advisory Committee. The practicum must be a minimum of 3 credit hours (maximum of 6 credit hours) and may consist of library research, special problems, internships, etc., as agreed upon by the student and major professor, and approved by the Advisory Committee.

M.S. and Ph.D. students will be required to post a formal notification of scheduled examinations on the notice board in the main departmental office two weeks prior to the examination date. All graduate students will be required to place designated and appropriately preserved voucher specimens in a proper collection.

# Core Requirements

All M.S. and Ph.D. students must satisfy the following core course requirements:

- 1. An undergraduate course in general entomology. Students who have not had such a course must take ENT 300.
- 2. ENT 564 Insect Taxonomy
- 3. STA 570 Basic Statistical Analysis

- 4. Each M.S. student must take two semesters of ENT 770, Entomological Seminar, (or approved equivalent seminars) and Ph.D. candidates must take four semesters of approved seminars. Seminars in other departments can be substituted for ENT 770 upon approval of the Advisory Committee. Ph.D. candidates who received their M.S. degree in Entomology from the University of Kentucky will also be required to take four semesters of ENT 770 in addition to the two semesters taken while an M.S. student. Semesters of ENT 770 beyond the two required for the M.S. degree can be used toward the Ph.D. requirement.
- 5. Ph.D. and M.S. candidates using the Plan A option must take a minimum of one course from two of the following core areas. M.S. candidates using the Plan B option must take a minimum of one course from all three core areas.

# Core area 1: Insect Behavior, Ecology, Evolution and Systematics.

ENT 568 Insect Behavior;

ENT 607 Advanced Evolution;

ENT 625 Insect-Plant Relationships;

ENT 660 Immature Insects;

ENT 665 Insect Ecology

# Core area 2: Insect Molecular Biology, Physiology and Genetics

ENT 567 Applications of Genetics;

ENT 635 Insect Physiology and Internal Morphology

# Core Area 3: Pest Management and Applied Ecology

ENT 530 Integrated Pest Management;

ENT 561 Insects Affecting Human and Animal Health;

ENT 574 Advanced Applied Entomology;

ENT 680 Biological Control

In all cases, an equivalent graduate level course from another institution is acceptable upon approval of the Advisory Committee. Such approval will not decrease the minimum number of credits required, but simply will permit the student to take other courses.

All students are expected to attend all Department of Entomology "departmental" seminars (different from ENT 770) and are encouraged to attend seminars related to their subject matter interests given by other departments.

# Master of Science (Plan A)

In addition to meeting all general requirements for Master's degrees as identified in the Graduate School Bulletin, the candidate must complete at least 24 semester credit hours of graduate course work with a standing of 3.0 or higher and write a thesis. Credit hours obtained from the core courses listed above are included as part of the minimum number. One half of the minimum course work must be in the major area. At least 16 credit hours must be in regular courses. At least half the minimum required courses must be 600 or 700 level courses. A candidate for the M.S. degree may transfer up to 6 credit hours from another University toward the satisfaction of the minimum requirements of the Graduate School for that degree.

Note: Any research credits (ENT 790) taken for work done on the thesis do NOT count toward the minimum of 24 credits required for the degree.

No later than two weeks before the final examination, the Major Professor and the Director of Graduate Studies must submit the Final Examination Recommendation form and the Thesis Approval Sheet to the Graduate School. The Thesis Approval Sheet indicates that the thesis satisfies all requirements of the Graduate School and is complete in content and format with the exception of pagination, and that the student is ready for examination. The final copy of the thesis must be a high quality printout on white paper.

#### Master of Science (Plan B)

In addition to meeting all general requirements for Master's degrees as identified in the Graduate School Bulletin, the candidate must complete at least 36 semester credit hours of graduate course work with a standing of 3.0 or higher and present a written report on his/her Practicum. Credit hours obtained from the core courses listed above are included as part of the minimum number. One half of the minimum course work must be in the major area. At least 24 credit hours must be in regular courses. At least half the minimum required courses must be 600 or 700 level courses. A candidate for the M.S. degree may transfer up to 6 credit hours from another University towards the satisfaction of the minimum requirements of the Graduate School for that degree.

No later than two weeks before the final examination, the Major Professor and the Director of Graduate Studies must submit the Final Examination Recommendation form to the Graduate School. A written report on the Practicum must be provided to each member of the Advisory Committee at the time the Final Examination Recommendation form is submitted to the Graduate School.

# Ph.D. Degree

For the Ph.D. degree, additional specific course requirements (beyond the core requirements) are determined by the Advisory Committee appointed for each student by the Dean of the Graduate School.

The Degree of Doctor of Philosophy is conferred upon a candidate who, normally after completing at least three years of graduate work devoted to study of a special field of

knowledge, passes a comprehensive examination on his/her dissertation subject and chosen field, presents a satisfactory dissertation, and shows evidence of scholarly attainment.

All Ph.D. graduate students in Entomology are expected to have scientific knowledge in general biology, general entomology, statistics, and general mathematics.

In addition to the above broad general areas, the following 20 categories will be used to identify areas of particular expertise. These entomological categories are:

Acarology Molecular/Cell Biology

Apiculture/Social Insects Morphology Araneology Pathology

Behavior Physiology/Biochemistry Biological Control Plant - Insect Interaction

Crop/Forest Protection Stored Product

Ecology Taxonomy/ Systematics
Evolution Toxicology

Evolution Toxicology
Genetics Urban/Structural

Medical/Veterinary Vectors of Plant Pathogens

In addition to the 20 categories listed above, a student with the advice and consent of her/his Advisory Committee may identify one other category (this category need not be entomological) that can be used as one of the four areas of particular expertise.

Each student will be evaluated on his/her general knowledge of the above listed areas at the time of the diagnostic interview. This interview should occur at the time of the first meeting of the student's Advisory Committee which normally occurs during the first semester of the student's graduate study. At this meeting and based on the findings of the diagnostic interview, the student and Advisory Committee will identify and select **four** areas in which the student will be expected to develop specific expertise. These areas of specific expertise need not reflect areas of existing strength but rather may be areas that the student and/or the Advisory Committee wish to see developed. The student will be expected to demonstrate (during the Qualifying Examination) in-depth knowledge in her/his chosen areas of expertise.

The student will be expected to have general knowledge in the remaining areas as well as the broad areas of general biology, general entomology, statistics and general mathematics. The Advisory Committee will have the responsibility to verify that the student has general knowledge in the remaining areas not identified for particular expertise. This evaluation can be achieved in the diagnostic interview, the written qualifying examination and the oral qualifying examination.

Some specific requirements for the Ph.D. degree granted through the Department of Entomology are:

1. <u>Residence</u> - Requirements for the doctorate may be completed in three years of full-time graduate work or the equivalent in combined full-time and part-time

study (see the Graduate School Bulletin for specific residence requirements).

- a. Two consecutive semesters of full time residence at the University of Kentucky are required prior to the qualifying examination.
- b. Students must complete a second year of residency in one or a combination of the combination of the following:
  - i. Transfer residence credit from an awarded masters degree from another school.
  - ii. Complete a minimum of eighteen hours of course work (part-time or full-time) beyond the two full-time consecutive semesters (see a. above).
  - iii. Apply hours completed while pursuing a University of Kentucky masters degree.
- b. Each student must register for two consecutive full-time (9 credit hours) semesters of residence credit (ENT 769) immediately following the qualifying examination. Full time residence credit is given the semester of the qualifying examination if the student registers for nine credits of ENT 769 and completes the examination within the first 6 weeks of the semester. With the written recommendation of a candidate's Advisory Committee and with the approval of the Director of Graduate Studies and the Graduate Dean, specified graduate course work may be taken in lieu of all or part of the residence credit (ENT 769) requirement. Please refer to the Graduate School Bulletin for details on post-qualifying residence.
- d. After the above requirements have been satisfied, the candidate must register each semester until the dissertation is completed and successfully defended. This is necessary for proper maintenance of University records and the student must be re-admitted to the Graduate School if he/she fails to register for 12 months. Furthermore, registration in ENT 749 after other course requirements are completed has tangible benefits for students, including issues related to student-loan repayment and INS concerns. This requirement can be satisfied by registering for ENT 749 (0 credit hours, no tuition).

**Note:** Only the DGS can register students for zero credits in ENT 749.

2. <u>Diagnostic interview</u> - A diagnostic interview will be held at the time of the first meeting of the student's Advisory Committee, usually held before the end of the student's first semester, in any case no later than six weeks into the second semester. The purpose of the diagnostic interview is to determine the student's academic background, subject areas of primary interest, and career goals. Based on this interview, the Advisory Committee will recommend specific courses for

the student's curriculum. Also, four areas of specific expertise will be identified during the diagnostic interview. The committee's recommendation following the diagnostic interview will be summarized in a letter from the Major Professor to the student's file held by the DGS (copies to be sent to the student and the Advisory Committee members).

- 3. Qualifying Examination The qualifying examination must be both written and oral and is normally taken during or after the student's fourth semester of full-time graduate study or the equivalent. Students will be tested on their knowledge of general biology, general entomology, statistics and general mathematics, general knowledge of the 20 areas of particular expertise, and in-depth knowledge in the areas of specific expertise identified at the time of the diagnostic interview. Members of the Advisory Committee from within the Department of Entomology will evaluate entomological areas of particular expertise. Normally, the outside member of the Advisory Committee will be responsible for the evaluation of the student's ability in any selected non-entomological area of particular expertise.
  - a. The Written Examination. The written qualifying examination will consist of questions generated by the Advisory Committee. The Advisory Committee has the option of soliciting questions from any other member of the Entomology graduate faculty. Generally, the Major Professor will administer the examination following the instructions of each committee member. The entire written examination is usually completed within seven consecutive days or less. The answers are evaluated by the committee members. The score or percentage grade required for passing is left to the discretion of the Advisory Committee.
  - b. The Oral Examination. This will be administered after successful completion of the written examination according to Graduate School rules. The oral examination usually occurs about 2 weeks after completion of the written examination.
    - If the examination is failed, a student may repeat his/her qualifying examination after a minimum of four months has expired. A student may have no more than two chances to pass a qualifying examination.
- 4. <u>Dissertation</u> Each student must present a dissertation that is the result of original research. It must conform to instructions provided by the Graduate School.
- 5. <u>Presenting Dissertation and Final Examination</u>. Procedures for presenting the dissertation to the Advisory Committee and the Graduate School are as follows:
  - a. **AT LEAST EIGHT WEEKS** prior to the final examination, the Major Professor will prepare a Notification of the Intent to Schedule a Final Examination form for the signature of the Director of Graduate Studies (DGS)

- and transmittal of the form to the Graduate School. The Major Professor must verify that the dissertation is sufficiently prepared to merit this action.
- b. The Graduate Dean will appoint an Outside Examiner as a core member of the Advisory Committee. See below regarding copy for Outside Examiner.
- c. Distribute a complete copy of dissertation to members of the Advisory Committee **AT LEAST FOUR WEEKS** prior to the final examination.
- d. Specific time and date scheduling.
  - i. At least two weeks prior to the examination the Major Professor completes a Request for Final Examination Form and a Dissertation Approval Form for transmittal to the Graduate School. All members of the Advisory Committee except the Outside Examiner have had an opportunity to read the dissertation prior to signing the Dissertation Approval Form and any major revisions should have been completed. The Request for Final Examination form must be signed by the Director of Graduate Studies.
  - ii. A high quality copy of the dissertation must be presented to the Graduate School with the Dissertation Approval form that must be signed by a majority of the Advisory Committee. The draft must be complete in content. The pre-examination copy of the dissertation must include title page, abstract, table of contents with page numbers, complete text, footnotes, list of tables, list of figures, appendices, references and it must be typed in final format form. This copy, after approval by the Graduate School Office, should be presented to the Outside Examiner.
  - iii. The Graduate School designates the specific time and date of the examination at least two weeks prior to the actual examination.
- e. The Final Examination involves primarily a defense of the dissertation including knowledge of the literature, methods, results, statistics, and conclusions. Additional broad, conceptual or philosophical questions arising from discussion of the dissertation research and the student's future also are appropriate. Exceptions to this would be further examination of any deficiencies identified during the qualifying examination that may be reexamined here. The Final Examination is conducted by the Advisory Committee plus an Outside Examiner appointed by the Graduate School and is chaired by the DGS or someone designated by the DGS. The examination is a public event. Any member of the University may attend.
- f. The final copy of the dissertation is prepared after the Final Examination is passed. The final copies, with signatures of the Major Professor and DGS,

must be received in the Graduate School within 60 days of the Final Exam. A degree will not be conferred until the Graduate School has received copies of the dissertation. Only high quality copies are acceptable by the Department of Entomology.

#### ACADEMIC PERFORMANCE, PROBATION AND TERMINATION

A student's cumulative grade-point average (GPA) must be at or above a 3.0 as established by the Graduate School. If a student's GPA drops below 3.0 he/she is placed on probation. Following placement on probation, a student is allowed one semester to achieve a cumulative 3.0 GPA. Enrollment of a graduate student in the Entomology graduate program may be terminated for the following reasons (these are not the same rules used for assistantship termination):

- 1. Academic probation for three enrolled semesters (i.e., being placed on academic probation three different semesters.
- 2. Having failed the final examination for the Master's degree or the Ph.D. qualifying examination two times. (See Graduate School Bulletin for additional rules on final Ph.D examination).
- 3. <u>Unsatisfactory progress prior to the qualifying examination</u>: Prior to the qualifying examination, the Ph.D student will meet annually with the Advisory Committee for review of his/her progress, course work, dissertation research, and other areas of professional development. The student will be informed by the Major Professor in writing of specific weaknesses requiring improvement. Those weaknesses considered sufficient for possible termination will be reported to the Graduate School and a time period established for correction and for another evaluation of the student. If a majority of the Graduate Faculty of the Program feel the weaknesses have not been corrected by the established time, a recommendation will be made to the Graduate School for termination of the student's enrollment.
- 4. <u>Unsatisfactory progress after the qualifying examination</u>: After passing the qualifying examination the candidate will meet annually, or more often if deemed necessary, with her/his Advisory Committee. In cases where the Advisory Committee recommends termination after the qualifying examination has been passed, the Department's Graduate Faculty will meet to vote on the recommendation. If a majority of the Graduate Faculty of the Program concur with the original decision, a recommendation will be made to the Graduate School for termination of the student's enrollment.

#### **FACILITIES**

The Department of Entomology has excellent facilities and equipment for graduate research. In general, equipment is under control of individual faculty members; however, all equipment may be shared and is readily available to other faculty and students. Consideration for the time and property of others, and knowledge of operation are essential for fostering cooperative use of facilities and equipment. Use of equipment may be denied to individuals who do not properly care for equipment and space.

# **PLACEMENT**

Part of the faculty's responsibility in accepting a graduate student advisee is assistance in placing the student in a position at the completion of the degree program. This assistance is given primarily in the form of recommendations. A student can expect a faculty reference to give an honest appraisal of the student's academic performance, attitude, work habits, communication skills, grasp of subject matter, capability to conduct independent research, and potential future performance. It is very important for a student to develop positive professional relationships and to establish credibility with the Major Professor and members of the Advisory Committee.

#### **CHECK SHEET**

### Master's Degree, Plan A

Written request for transfer courses submitted to Director of Graduate Studies.

Selection of Advisory Committee, preferably by the end of the first semester of tenure - <u>Submit</u> Form to Director of Graduate Studies.

Research proposal submitted to Advisory Committee

Presentation of research proposal at Departmental Seminar

Correct number of hours/requirements for program (total  $\geq$  24 graduate credits)

1/2 of minimum requirements of credit hours must be at 600/700 level (12)

1/2 of minimum course work must be in the major area (12) and  $\frac{3}{4}$  of those must be at the 600 or 700 level (9)

2/3 of minimum requirements of credit hours must be in regular courses (16)

Completion of core courses and seminar requirements listed earlier in this document

Obtain thesis guidelines from the Graduate School (available online).

Apply for graduation (within 30 days after beginning of semester of expected graduation; 15 days in Summer School). (Form available online from Graduate School)

Submit copy of thesis to Advisory Committee at least two weeks prior to Final Examination; major professor must "approve" thesis at time Thesis Approval Sheet is submitted (see below).

Formal notification of Final Examination. Submit MS Final Examination Recommendation form and Thesis Approval Sheet at least two weeks prior to examination; Examining Committee consists of Advisory Committee

MS Final Examination

Presentation of exit seminar (during final semester; Spring Semester if graduating in August)

Archived research data on CD submitted to the DGS prior to request for DGS's signature on final copy of thesis

Final copies of thesis to Graduate School and Department within 60 days after the Final Examination

#### **CHECK SHEET**

#### Master's Degree, Plan B

Written request for transfer courses submitted to Director of Graduate Studies.

Selection of Advisory Committee, preferably by the end of the first semester of tenure - <u>Submit</u> Form to Director of Graduate Studies

Practicum proposal submitted to Advisory Committee

Correct number of hours/requirements for program (total  $\geq$  36 graduate credits)

1/2 of minimum requirements of credit hours must be at 600/700 level (18)

1/2 of minimum course work must be in the major area (ENT) (18) and  $\frac{3}{4}$  of those must be at the 600 or 700 level (14)

2/3 of minimum requirements of credit hours must be in regular courses (24)

Completion of core courses and seminar requirements listed earlier in this document

Apply for graduation (within 30 days after beginning of semester of expected graduation; 15 days in Summer School). (Form available online from Graduate School)

Submit copy of Practicum report to Advisory Committee at least two weeks prior to the Final Examination

Formal notification of Final Examination to Graduate School. Submit MS Final Examination Recommendation form and Practicum Approval Sheet two weeks prior to examination; Examining Committee consists of Advisory Committee

MS Final Examination

Presentation of exit seminar (during final semester; Spring Semester if graduating in August)

#### **CHECK SHEET**

#### Ph. D. Degree

Advisory Committee appointed - First year - Submit Form to Graduate School

Diagnostic Interview with Advisory Committee

Presentation of research proposal at Departmental seminar

Completion of core courses and seminar requirements listed earlier in this document

Two years residence, pre-qualifying requirement (i.e., physical presence and enrolled full time, not a "residence course")

Written request for use of Master's degree for 1 year of pre-qualifying residence (if applicable)

Two week prior notification for recommendation for qualifying examination - <u>Submit Form to</u> Graduate School

Notification of results of qualifying examination to Graduate School by DGS

Two consecutive full-time semesters ENT 769 (Residence Credit) after qualifying examination (alternative model for part-time students is described in online Graduate School Bulletin)

Obtain dissertation guidelines from the Graduate School (available online)

Application for graduation within 30 days of beginning of semester of expected graduation; 15 days during Summer School - <u>Submit Form to Graduate School (available online)</u>

Notification to Graduate School of intent to schedule Final Examination (8 weeks prior) - <u>Submit Form to Graduate School</u>

Formal request to schedule final oral examination to Graduate School at least two weeks prior to examination date; requires submission to Graduate School of <u>signed Dissertation Approval</u>

<u>Sheet, a copy of the dissertation for inspection</u>, and <u>Request for Final Examination</u> form at least 2 weeks prior to examination

Presentation of exit seminar (during final semester; Spring Semester if graduating in August)

Archived research data on CD submitted to the DGS prior to request for DGS's signature on final copy of dissertation

Final copies of dissertation submitted to Graduate School and Department not later than 60 days after the Final Examination.

# **FORMS**

Fill out and print these forms online.

**Advisory Committee Request Form** (M.S. Degree)

**Practicum Approval Form** (M.S. Degree – Plan B)

**Areas of Particular Expertise** (Ph.D. Degree)