



Graduate Handbook

Louisiana State University

Department of Entomology

Revised - Spring 2015

Graduate Handbook
Department of Entomology
Louisiana State University
Revised Spring 2015

Table of Contents

<u>Introduction</u>	2
<u>Admission Requirements</u>	2
<u>Assistantships and Fellowships</u>	2
<u>Course Loads and Continuous Registration</u>	3
<u>Requirements for the Master’s Degree</u>	3
Advisory Committee.....	3
Credit Hours and Course Work	3
Thesis Research Proposal and Examination.....	3
The Thesis	3
Thesis Defense.....	4
<u>Requirements for the Ph.D. Degree</u>	4
Advisory Committee.....	4
Credit Hours and Course Work.....	4
Dissertation Research Proposal and Plan of Study Review.....	5
General Examination.....	5
Teaching Requirements.....	6
The Dissertation.....	6
Final Examination and Dissertation Defense.....	6
<u>Requirements for a Minor in Entomology</u>	6
<u>Schedule of Academic Events</u>	6
Master’s Degree.....	6
Doctoral Degree.....	7
<u>Awards</u>	8
Department of Entomology Awards.....	8
LSU Campus Wide Awards.....	8
Entomology Society of American Awards.....	8
Other Awards.....	9
<u>Entomology Club</u>	9
<u>Voucher Specimens</u>	10
<u>Appendix A: Guide for Theses & Dissertation Research Proposal & Program of Study</u>	12
<u>Appendix B: Courses and Course Schedules</u>	13
<u>Appendix C: Timelines for Acceptable Progress Toward Graduate Degrees</u>	14
<u>Appendix D: M.S. Graduate Assessment Survey</u>	15
<u>Appendix E: Ph.D. Graduate Assessment Survey</u>	16
<u>Appendix F: Guidelines for Assigning Credit for Students in ENTM 7010: Teaching Practicum</u>	17

INTRODUCTION

The purpose of this handbook is to provide current and prospective graduate students with Departmental and University policies regarding Master's and Doctoral degrees in Entomology at LSU. Each student is responsible for familiarizing his- or herself with these guidelines and Graduate School regulations to facilitate an orderly and successful progression through the graduate program in Entomology.

ADMISSION REQUIREMENTS

Admission to the graduate program in Entomology is a three-step process beginning with application to the Graduate School. Application for admission to the Graduate School can be made online at <http://gradlsu.gs.lsu.edu>. The application packet should include:

- one set of official transcripts for all collegiate course work,
- official verbal and quantitative GRE scores,
- TOEFL scores (if degree is from a non-English curriculum),
- three letters of recommendation, and
- payment of a non-refundable fee set by the Graduate School.

After the completed application is received and processed by the Graduate School, it is forwarded to the Entomology Department for review by the Admissions Committee. The Department requires students to have a minimum GPA of 3.0 (4.0 scale) for their undergraduate coursework, and a minimum GRE score of 297 (combined verbal and quantitative) for admission. Exceptions are made if high scores in one category compensate for low scores in the other. Finally, students are advised to make contact with their prospective Major Advisor early in the admission process because they will not be accepted into the Department without verification of financial support.

If the student is accepted by the Department for admission, the approved application is forwarded to the Graduate School for final acceptance and processing. The student will be formally notified as to the final outcome of their application by the Graduate School.

ASSISTANTSHIPS AND FELLOWSHIPS

Incoming graduate students are encouraged to apply for University and Departmental assistantships. LSU offers highly competitive research fellowships and assistantships for outstanding M.S. and Ph.D. students. These are administered through the Department, Graduate School and the College of Agriculture, and most require applications that should be submitted by mid-February for the following Fall semester.

In addition, graduate research assistantships are awarded by the Department to qualified students on a competitive basis and are half-time (i.e., 20 hours/week) research appointments. Students must maintain satisfactory performance to remain on an assistantship. This requires maintaining a cumulative GPA of at least a 3.0 (on a 4.0 scale), and satisfactory progress on research. The expected periods of time for students to complete the M.S. and Ph. D. degrees are 2 ½ and 4 years, respectively, and departmental assistantships are generally not extended beyond these time periods. Stipends for graduate students vary depending on the source of funds and possible supplements (i.e., from the Graduate School or grants). Tuition (but not other fees) is waived for students receiving graduate assistantships.

COURSE LOADS AND CONTINUOUS REGISTRATION

The minimum course load to maintain a full-time graduate assistantship is 9 hours during Fall and Spring, and 6 hours during Summer. Students not receiving an assistantship must be registered for a minimum of 1 credit hour during the semester of the Master's final exam or the Doctoral general exam. Doctoral candidates must maintain continuous registration for a minimum of 3 hours each semester (excluding summer) from the completion of the general examination to the end of the semester in which they graduate. Students with graduate assistantships are expected to devote the majority of their time to their graduate studies and are strongly discouraged from seeking outside employment.

REQUIREMENTS FOR THE MASTER'S DEGREE

Graduate Advisory Committee - The Graduate Advisory Committee consists of at least 3 members of the Graduate Faculty, at least one of whom is a full member of the Graduate Faculty. The Major Professor is the chair of the committee with other members chosen by the student in consultation with the Major Professor. If there is an external minor, one committee member must represent the minor department. The committee must be established within the first 6 months of the student's tenure in the Department.

Credit Hours and Course Work- The minimum requirement for a Master's degree is 30 hours of graduate work, including 24 hours of course work and 6 hours of thesis research. At least 15 hours of course work must be graduate (7000) level, which includes required courses and the 6 hours of research (ENTM 8000). Available courses are shown in Appendix A. The Master's degree must be completed within five years from entrance into the degree program. Specific departmental course requirements include:

<u>Required Courses:</u>	<u>Credits:</u>
ENTM 4005 Insect Taxonomy	4
ENTM 7001 General Entomology	4
ENTM 7016 Insect Physiology	4
ENTM 7007 Seminar in Entomology	<u>1</u>
	13
Additional Courses	<u>11*</u>
	24
<u>ENTM 8000: Thesis Research</u>	<u>6</u>
	30

* Only upper level undergraduate (4000) or graduate (7000) courses can be taken to satisfy this requirement. Special topics (ENTM 7008) may be taken multiple times when topics vary for a maximum of 6 credit hours.

Thesis Research Proposal- A Master's student is required to have a research proposal and a plan of study accepted by his or her Graduate Advisory Committee by the end the first 6 months of study. Guidelines for this proposal are given in Appendix B. A list of completed courses and those proposed to meet departmental requirements should also be prepared. A meeting of the Graduate Advisory Committee should be convened by the student within 6 months to discuss his/her proposal and course work. (Appendix C)

The Thesis - The thesis must follow the guidelines for *Preparation of Theses and Dissertations* available online at <http://gradschool.lsu.edu/etp>. The thesis should be delivered to the Graduate Advisory Committee members no later than 2 weeks prior to the defense examination. **If possible, the student's departmental seminar (ENTM 7007) should be scheduled to immediately precede the defense.**

Master's Examination/Thesis Defense - Master's students are required to pass a comprehensive oral examination. The scope of this examination includes, but is not confined to, the student's thesis research. Members of the student's committee will use a standardized rubric (Appendix D) to evaluate his/her performance in three areas: 1) understanding of fundamental principles of entomology; 2) proficiencies in oral and written communication; and 3) the Master's research, which includes development of a research plan, knowledge of relevant scientific literature and statistical techniques, and conduct of the research. Performance in each area is judged using the following scale: 1= below average, 2= average, 3= good, 4 = very good, or 5= superior (top 5%). Rankings from each committee member will be averaged, and the student must receive a passing score (i.e., ≥ 2.0) from the majority of committee members. A student not passing may be re-examined upon a majority vote of the committee. Failure upon reexamination will result in termination of the student's enrollment as a graduate student in Entomology.

A series of forms with deadlines are required and a schedule of important dates is published each semester by the Graduate School. If a student fails the defense and is to be re-examined, forms recording the failure are to be turned in to the Graduate. The graduate student is responsible for making sure the Graduate School receives these forms on time. See a later section in this handbook, Schedule of Academic Events/Master's Degree (page 7), for a list of required forms. Turn in voucher specimens (see page 10) to the Louisiana State Arthropod Museum by the time the thesis is submitted to the Graduate School.

REQUIREMENTS FOR THE PH.D. DEGREE

The Doctor of Philosophy (Ph.D.) is the highest degree offered by universities. It is conferred only for work of distinction in which the student displays decided powers of original scholarship and only in recognition of marked ability and achievement. The basic requirements are: 1) a student must exhibit unmistakable evidence of mastery of a broad major field (evidenced by passing the general exam); and 2) a student must prove ability to complete a significant program of original research by preparing a dissertation embodying creative scholarship and by passing a rigorous final examination. The dissertation must add to the sum of existing knowledge and give evidence of considerable literary skill.

Graduate Advisory Committee - The Graduate Advisory Committee has at least four members: 3 chosen by the student, plus a representative appointed by the Graduate School (i.e., the "Dean's Representative"). The committee consists of at least 3 members of the LSU Graduate Faculty, including the Major Advisor, who acts as the chair. At least 2 members must be from the Entomology Department, with at least 1 of these being a full member of the Graduate Faculty. The remaining members may be from Entomology or another department, with 1 being a full member of the Graduate Faculty. If the student declares a minor, 1 committee member must be from the minor department. The committee should be established by the end of the first year of the student's graduate career. (Appendix C)

Credit Hours and Course Work- A Doctoral program involves at least 3 years of full-time study beyond the baccalaureate degree. It is the responsibility of the Advisory Committee to determine the total number and types of courses to be taken to suit the needs of each student; however, at least 15 hours of coursework must be graduate (7000) level. For incoming students without a Master's degree in Entomology, this equates to a minimum of **41 hours of coursework plus 13 hours of dissertation research**. Students with a Master's degree in Entomology who transfer courses to satisfy required course requirements must take at least 23 additional hours of coursework plus 13 hours of dissertation research. The doctorate must be completed within seven years from the time a student is classified as a Doctoral student (Grad 7).

Introductory Seminar, Dissertation Research Proposal and Program of Study - By the end of the first

year, students are required to have presented an Introductory Seminar that details their research plan, and to have had their research proposal accepted by his or her Graduate Advisory Committee. Guidelines for the proposal are given in Appendix B. A list of completed courses and those proposed to meet departmental requirements (the Program of Study; Appendix C) should also be prepared and presented to the Committee for approval. Upon approval, it is the student's responsibility to confirm with the LSU Graduate School that courses proposed for transfer credit meet LSU requirements.

Minimum requirements for the Ph.D. degree include:

<u>Required Courses:</u>	<u>Credits:</u>
ENTM 4005 Insect Taxonomy	4
ENTM 7001 General Entomology	4
ENTM 7016 Insect Physiology	4
ENTM 7007 Seminar in Entomology (includes Introductory Seminar)	2
ENTM 7008 Special Topics	3
ENTM 7010 Teaching Practicum	<u>1*</u>
	18
<u>Additional Courses:</u>	<u>23**</u>
	41
ENTM 9000: Dissertation Research	<u>13</u>
	<u>54</u>

* ENTM 7010 may be taken multiple times for up to 3 hrs credit.

** Only upper level undergraduate (4000) or graduate (7000) level courses can be taken to satisfy this requirement. In addition to the 3 hrs that are required, Special Topics (ENTM 7008) may be taken multiple times when topics vary for an additional 6 credit hours. Additional courses may not include transfer credits, independent study, or ENTM 9000.

Teaching Requirements - Each Ph. D. candidate is required to assist in teaching a course for a minimum of one semester. They are required to register for ENTM 7010: Teaching Practicum (1-3 credit hours). Scheduling student teaching is the responsibility of the student and his/her advisor. The teaching can be associated with any course that the student is deemed qualified to teach by his/her Major Advisor and the instructor of the course, but students must assist with teaching in either AGRI 1005 or ENTM 2001 prior to receiving credit for other courses. Credit for ENTM 7010 will be assigned using a defined rubric (see Appendix F) following an evaluation by the Graduate Advisor (or Department Head) and the instructor of the course.

General Examination - The general exam is oral, but may also contain written questions from individual committee members. The exam is taken after most of the student's coursework is completed, normally after 2 full years of graduate study. Entomology requires that the general exam be taken by the end of the 3rd calendar year of classification as a Doctoral student. Students must be registered for at least 1 hour of credit during the semester of the exam, which may be scheduled on any day that the University is open for business and committee members are available. A request for the exam must be submitted to the Graduate School at least 3 weeks prior to the proposed date. It is the student's responsibility to complete this form, obtain the Major Professor's signature, and submit the form to the Academic Assistant in the Entomology office.

Members of the student's committee will use a standardized rubric (Appendix E) to evaluate his/her performance in three areas: 1) understanding of fundamental principles of entomology; 2) proficiencies in oral and written communication; and 3) the Doctoral research, which includes conception of research and knowledge of relevant scientific literature, application of statistical techniques, and the originality and conduct of the research. Performance in each area is judged using the following scale: 1= below average, 2= average, 3= good, 4= very good, and 5= superior (top 5%). Rankings from each committee member will be

averaged, and the student must receive a passing score (i.e., ≥ 2.0) from the majority of committee members. There are 3 possible outcomes if the general examination is failed: 1) the exam is repeated at a date agreed upon by the committee; 2) the student is directed toward completion of a Master's Degree if applicable; or 3) the student is dropped from the program. If a student fails and is to be re-examined, forms recording the failure are submitted to the Graduate School.

The general exam is regarded as the culmination of a student's coursework, and remaining time should be devoted to concentrated work on the dissertation. At least three months must elapse between the general and final examinations. Doctoral candidates must maintain continuous registration for a minimum of 3 hours each semester (excluding summer) from the completion of the general examination until graduation.

The Dissertation - The dissertation must demonstrate a mastery of research techniques, ability to perform original and independent research, and skill in formulating conclusions that expand upon or modify accepted ideas. The style of the dissertation must follow the guidelines for *Preparation of Theses and Dissertations* available online at <http://gradschool.lsu.edu/etp>. The dissertation should be delivered to members of the student's Graduate Advisory a minimum of 2 weeks prior to the date of the final examination/dissertation defense.

Final Examination/Dissertation Defense – The final examination is an oral defense and is concerned primarily with dissertation research and related problems. Upon completion of the dissertation and early in his/her final semester, the student will schedule the final examination. Exams may be scheduled on any day that the University is open for business and committee members are available; however, the exam cannot be scheduled until at least one manuscript has been accepted for publication in a peer-reviewed journal. If possible, a departmental seminar should be scheduled immediately preceding the defense.

The Graduate School must be notified of the student's intention to complete degree requirements. A schedule of important dates and deadlines is issued by the Graduate School each semester and should be consulted. A Request for Doctoral Final Examination must be submitted to the Graduate School at least 3 weeks prior to the scheduled date and by current semester deadlines for degree candidates. It is the student's responsibility to complete and submit this form to the Academic Assistant in the Entomology office.

To pass, there cannot be more than one dissenting vote. Upon a majority vote, a student not passing may be re-examined. Failure upon reexamination will result in termination of the student's enrollment as a graduate student in entomology. A series of forms with deadlines are required and a schedule of important dates is published each semester by the Graduate School. The graduate student is responsible for making sure the Graduate School receives these forms on time. See Schedule of Academic Events/Doctoral Degree (page 7) for a list of required forms. Turn in voucher specimens (see page 10) to the Louisiana State Arthropod Museum by the time the dissertation is turned in.

REQUIREMENTS FOR A MINOR IN ENTOMOLOGY

Departmental requirements for a minor in Entomology consists of 10 hours of entomology course work at or above 4000 level taken at LSU, including at least one hour at or above 7000 level (such as a seminar or special topics class).

SCHEDULE OF ACADEMIC EVENTS

See the Entomology Department Academic Assistant to obtain forms and cards listed below in bold to be submitted to the Graduate School. Alternatively, the student may download most Graduate School forms from the LSU Graduate School website <<http://gradschool.lsu.edu/etp>> by first selecting Graduate Records and then Forms.

Master's Degree

1. Appointment of Major Professor
When: Before or during the first semester
Initiate through: Department Head
2. Nomination of Advisory Committee (at least 3 members)
When: By the end of 6 months
Initiate through: Major Professor
3. Formulation of **Plan of Study and Thesis Research** (see Appendix B). Meet with Advisory Committee to discuss proposal and course work. Put a copy in your file in the Academic Assistant's office.
When: By the end of 6 months
Initiate through: Major Professor
Approval by: Advisory Committee
4. Submit **Application for Master's Degree** form and **Diploma Page** to Graduate School.
When: Semester of Graduation. Consult Graduate Calendar for deadlines.
Initiate through: Major Professor
Approval by: Major Professor, Department Head/Grad Advisor, Dean of Graduate School
5. Schedule Master's Defense
When: At least three weeks before examination date. Consult graduate calendar for deadline.
Initiate through: Major Professor using Graduate School Form **Request for Master's Examination**. Give each committee member and Academic Assistant a copy.
Approval by: Advisory Committee, Department Head/Grad Advisor, and Dean, Grad School
6. Submit thesis to Advisory Committee
When: At least two weeks before the Master's Defense.
7. Submit Approved **Master's Examination and Thesis Report** (prepared and sent over by the Graduate School after you filed your **Request for Master's Examination**) and **Thesis Release Form** permitting Graduate School to photocopy your thesis on request.
Approval by: Advisory Committee, Dean of the Graduate School
8. Submission of electronic thesis to Graduate School.
When: See Graduate School calendar for deadline

SCHEDULE OF ACADEMIC EVENTS (cont.)

Doctoral Degree

1. Appointment of Major Professor
When: Before or during first semester
Initiate through: Department Head

2. Nomination of Advisory Committee (at least 4 members)
When: By the end of the second semester
Initiate through: Major Professor

3. Formulation of **Program of Study and Dissertation Research** (see Appendix B). Meet with Advisory Committee to discuss proposal and course work. Prepare your Program of Study using pages 2 and 3 of the Grad School's **Doctoral Degree Audit** form (available here: <https://sites01.lsu.edu/wp/graduateschool/files/2013/12/Doctoral-Degree-Audit-and-Request-for-General-Examination.pdf>) and, after approval by your committee, present it to the Graduate School for an informal audit. Note that you only need to complete pages 2 and 3 of this form.
When: By the end of the first year
Approved by: Advisory Committee and Graduate School (informal)

4. Submit **Request for Doctoral General Examination** form to the Graduate School. If there is a change in the Program of Study, submit **Request for Change of Program of Study for Doctoral Degree** at the same time.
When: A full academic year before expected date of final examination (normally toward close of second year of full-time graduate study). Most course work must have been completed. **Request for Doctoral General Examination** form should be submitted at least three weeks before examination date or by Graduate Calendar deadline, whichever is earlier.
Initiate through: Major Professor
Approval by: Advisory Committee, Department Head/Grad Advisor, Dean, Graduate School

5. Admission to Candidacy. Submit **Committee Examination Report** (sent to the Department by Graduate School after receiving **Request for Doctoral General Examination** form) to the Graduate School.
When: After passing general examination
Approved by: Advisory Committee, Dean of Graduate School

6. Submit **Application for Doctoral Degree** form to the Graduate School
When: Semester of Graduation. Consult Graduate Calendar for deadlines.
Approval by: Major Professor

7. Submit **Request for Doctoral Final Examination** to the Graduate School
When: At least three weeks prior to Final Examination date. Last date of Final Examination for a given semester is indicated in the Graduate Calendar. If changes in the Program of Study have been made, **Request for Change in Program of Study for Doctoral Degree** should be submitted to the Graduate School prior to graduation.
Initiate through: Major Professor
Approval by: Advisory Committee, Dept. Head/Grad Advisor, Dean, Graduate School

8. Submission of dissertation to Advisory Committee
When: At least two weeks before Final Examination

Initiated through: Major Professor

9. Final Examination/Dissertation Defense
When: Final date for taking the Final Examination in a given semester is indicated in the Graduate Calendar. After the Final Examination, submit the approved **Doctoral Examination and Dissertation Report** (prepared and sent over by the Graduate School along with degree cards after submitting your **Request for Doctoral Final Examination**) to the Graduate School.
Approved by: Advisory Committee, Dept. Head/Grad Advisor, and Dean of Graduate School
10. Electronic submission of dissertation and signed **Publishing Agreement Form** (obtained from Graduate School) to Graduate School.
When: See Graduate School Calendar for details.

AWARDS

LSU Department of Entomology Award:

L. D. Newsom Graduate Student Award - This award of \$1000 is given to individuals who exhibit excellence in academic achievement and graduate research. One award is available for nominees in the M.S. program and one award for a Ph.D. candidate. Nominations are due January 30th after a notice is circulated in the department by the Student Awards Committee with guidelines for nomination packets.

LSU Campus Wide Award:

Distinguished Dissertation Award in Science and Engineering - A nominee is selected from within the Entomology Department by the Student Awards Committee and forwarded to the College of Agriculture (COA). Nominations are due at the COA in early December. The COA selects one nominee which is submitted for competition at the university level.

Entomological Society of America Awards:

a) John Henry Comstock Award - This award, given by the National Office of the ESA to promote interest in the science of entomology at the graduate level and to stimulate interest in attending the national conference, consists of an all-expenses-paid trip to the ESA national conference, plus \$100 cash and a certificate. It is given to one graduate student from each Branch. Each Entomology Department in the Southeastern Branch nominates one Ph.D. student. Each nomination should contain a detailed resume prepared according to ESA requirements submitted by departments to the SEB-ESA Awards Committee. Nomination packets should be given to the departmental Student Awards Committee chair and this committee selects the department nominee. The departmental nominee's packet is due at the SEB on July 1st.

b) Kirby L. Hays Award - This award is sponsored by the Southeastern Branch and is given each year to an outstanding Master's student. The recipient is given \$250 and a plaque at the Annual Branch Meeting. Each Department nominates one student. Each nomination should contain a detailed resume prepared according to ESA requirements. The Student Awards Committee selects the departmental nominee after a call for nominations around July 1st and submits the nominee to the SEB by September 1st.

c) Robert T. Gast Award and Southeastern Branch Student Award - These two awards are given annually to a Ph.D. and M.S. student, respectively, presenting the best research paper as judged by both oral presentation and written work. The Gast Award recipient is given \$500 and the Southeastern Branch Student Award recipient is given \$250. Plaques are presented to both winners at the Annual Branch Meeting. Runners-up for these awards each receive \$100 and a plaque. The deadline for nominations is coincident with the deadline for receipt of titles and abstracts for student paper competitions at the SEB Annual Meeting, usually September or October. The paper submitted for consideration cannot have been submitted for publication prior to this deadline.

d) Southeastern Branch Outstanding Student Display Presentation Award - This award is given annually to the student presenting the best research paper in a display format based on both the presentation and a written summary. The recipient is given \$100 and a plaque at the Annual Branch Meeting. The deadline is announced annually and materials are sent to the SEB.

Other Awards:

Students are encouraged to compete for travel and research awards from various sources on campus such as the LSU Sigma Xi Chapter and the Graduate School and nationally from federal agencies (e.g. National Science Foundation's Dissertation Improvement Grants, EPA Star Fellowships), professional societies (e.g. Sigma Xi, American Women in Science), private foundations (e.g., The Nature Conservancy), and industry.

ENTOMOLOGY CLUB

The Entomology Club is composed of graduate students, associates, faculty, and others interested in entomological activities. Meetings are generally held on an 'as needed' basis. The club functions to give support to new students in the Department, to promote Departmental activities, and to generate an overall interest in entomology by making the public aware of research conducted at LSU. The club supports an outreach program to schools in the area by having members make classroom presentations on various aspects of entomology and encouraging science projects of an entomological nature. Social activities sponsored by the club include a fall cookout and spring crawfish boil. The club also provides input on various departmental issues through student assignments to committees. Income is generated through sales of shirts, hats, and honey. Officers (president, vice president, secretary and treasurer) are elected each year at the start of the Fall semester.

VOUCHER SPECIMENS

All students are **required** to submit voucher specimens to the Curator of the Louisiana State Arthropod Museum (LSAM) documenting species studied in their theses or dissertation research. A voucher specimen is any specimen that is the subject of study and is retained as a reference. For optimal utility, voucher specimens should be housed in a museum that can properly preserve, curate, and make them available for further study. They should be part of a publicly accessible scientific reference collection.

Guidelines for voucher specimens:

- A statement indicating where the voucher specimens are deposited is required in the theses or dissertation (e.g., voucher specimens are deposited in the LSAM);
- A series of 10 specimens of each species is suggested, but a single pair, ♀ and ♂, is adequate if the species is a common economic pest;
- Specimens from different localities should be included if site to site variation is an important aspect of the research;
- Specimens must be properly preserved and labeled (direct questions to LSAM personnel);
- Label paper should be 100% rag, 36 lb. ledger (this paper and instructions for computer generated labels are available in the LSAM);
- Each specimen requires three labels placed on the pin in the following order: data label, determination label, and voucher label (see below);
- Maximum size of all labels is 10 x 20 mm;
- If specimens are preserved in alcohol or on slides the same information must be placed with them.

VOUCHER SPECIMENS (cont.)

Data labels should read as follows (if all the information will not fit on one label, use two):

Country: State: Parish or County	Ex. USA: LA: W. Feliciana Par.
Specific locality & Lat./Long.	Feliciana Preserve
Date (Day-Month-Year)	30°47'N, 91°15'W
(month in roman numerals)	30-xii-2003 C.E. Carlton
Collectors name (both initials)	Mesophytic Forest/Berlese
Ecological Data &/or Collecting Method	

Determination labels should read:

Genus species Author	Ex. <i>Reaganis huangi</i> Ottea
Det. "name of identifier & year"	Det. J.A. Ottea 2011

Voucher labels should read:

VOUCHER SPECIMEN	Ex. VOUCHER SPECIMEN
Student's name & year of graduation	J. D. Smith 2004
LSU thesis or dissertation	LSU MS Thesis

Appendix A
SCHEDULE OF COURSES

Course No.	Semester offered	Credit hours	Title	Professor
ENTM 2001	F	3	Insects in the Environment	Davis/Henderson
ENTM 4002	F-E	3	Insect Biology (cross-listed w BIOL)	Ottea
ENTM 4005	S-O	4	Insect Taxonomy	Carlton
ENTM 4006	S-E	3	Fundamentals of Applied Entomology	Davis/ Stout
ENTM 4007	S-O	3	Forensic Entomology	Healy
ENTM 4018	F	4	Forest Insects and Diseases (cross listed w PLHL)	
ENTM 4040	S-E	3	Insect Ecology	Schowalter
ENTM 4099	F, S, Su	1-3	Undergraduate Entomology Research	Faculty
ENTM 4100	F-O	3	Insect Behavior	Henderson
ENTM 4199	V	1-3	Special Topics in Entomology	Faculty
ENTM 7001	S-E	4	General Entomology	Henderson
ENTM 7002	S-O	4	Plant Resistance to Arthropods	Stout
ENTM 7003	F-E	4	Adv. Medical/Veterinary Entomology	Healy/Foil
ENTM 7005	F-E	3	Classification of Immature Forms of Insects	Carlton
ENTM 7006	F-E	3	Advanced IPM	Huang
ENTM 7007	F, S	1	Seminar in Entomology	Carlton
ENTM 7008	F, S, Su	1-3	Special Topics in Entomology	Faculty
ENTM 7010	F, S	1-3	Teaching Practicum	Faculty
ENTM 7011	F	1	Introductory Seminar (PhD students only)	Carlton
ENTM 7015	F-O	4	Biological Control	Diaz
ENTM 7016	F-E	3	Introduction to Insect Physiology	Swale
ENTM 7017	F-O	3	Introduction to Insecticide Toxicology	Ottea
ENTM 7030	S-E	4	Aquatic Entomology (cross-listed w RNR)	Carlton/Kaller
ENTM 7080	F, S	3	Population Ecology (cross listed w BIOL)	BIOL Faculty
ENTM 7600	V	1-3	Extension Practicum (Clinic)	Ring
ENTM 7946	F, S	1	Seminar in Molecular Biology	BIOL Faculty
ENTM 7979	Su	1-8	Tropical Biology (OTS)	Faculty
ENTM 8000	F, S, Su	1-12	M.S. Thesis Research	Faculty
ENTM 8900	F, S, Su	1-4	Research Problems	Faculty
ENTM 9000	F, S, Su	1-12	Ph.D. Dissertation Research	Faculty

F= Fall, S= Spring, Su= Summer, V= Various.

O= Odd numbered years, E= Even numbered years.

OTS = Organization for Tropical Studies.

APPENDIX B
GUIDE FOR THESES AND DISSERTATION RESEARCH PROPOSAL
AND PLAN OF STUDY

Department of Entomology, Louisiana State University
Baton Rouge, Louisiana

(Date)

TITLE: A brief, clear, specific designation of the subject of the research. The title, used by itself, should give a good indication of the project.

OBJECTIVES: A clear, complete, and logically arranged statement of specific objectives of the project. If several objectives are proposed, they must be closely related. List them as 1, 2, 3, etc.

JUSTIFICATION: Should present the importance of the problem.

PREVIOUS WORK AND PRESENT OUTLOOK: A brief summary covering pertinent previous research on the problem, citing important and recent publications from other research institutions, as well as your own institution, the status of current research, and additional information needed, to which the project is expected to contribute. This review will help to determine work already accomplished.

PROCEDURE: A statement of essential work plans and methods to be used to attain each of the stated objectives. The procedure should correspond with objectives, and follow the same order. Phases of the work to be undertaken should be designated. The location of work and facilities and equipment needed and available should be indicated. Wherever appropriate, procedures should provide data suitable for statistical analysis and design of the experiments should be indicated.

PROBABLE DURATION: An estimate of the maximum time likely to be required to complete research and publish results.

INSTITUTIONAL UNITS INVOLVED: List each unit of the institutions contributing essential services or facilities. Responsibilities of each should be indicated.

LITERATURE CITED: List important and recent publications involving this field of work.

APPENDIX C

Timelines for Acceptable Progress Toward Graduate Degrees

Year	1		2		3		4		5	
Semester	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
<u>Master of Science</u>										
Assessment exam (Entering)		X								
Research Proposal/Committee Mtg	X-----X									
Thesis Defense					X					
Thesis/Graduation					X					
Assessment Exam (Exiting)					X					
<u>Doctor of Philosophy</u>										
Assessment exam (Entering)		X								
Intro Seminar (ENTM 7011)	X									
Research Proposal/Committee Mtg	X-----X									
General Examination				X-----X						
Final Exam/Dissertation Defense								X-----X		
Dissertation/Graduation									X-----X	
Assessment Exam (Exiting)									X-----X	

APPENDIX D
DEPARTMENT OF ENTOMOLOGY
M.S. GRADUATE ASSESSMENT SURVEY

Student Name: _____.

Exam Date: _____.

Faculty Name: _____.

This rubric is designed to assess the learning goals (objectives of our matrix) adopted by the Entomology Faculty. For each of the following questions, rank the student on the following scale:

1 = below average

4 = very good

2 = average

5 = superior (upper 5%)

3 = good

N/A = not able to judge

Objective 1.

___ understanding of fundamental principles of Entomology

Objective 2.

___ proficiency in oral communication

___ proficiency in written communication

Objective 3.

___ development of a research plan

___ knowledge of literature

___ understanding of statistical techniques

___ conduct of research

Comments

APPENDIX E
DEPARTMENT OF ENTOMOLOGY
Ph.D. GRADUATE ASSESSMENT SURVEY
For use in General and Dissertation Defense Exam

Student Name: _____.

Exam Date: _____.

Faculty Name: _____.

This rubric is designed to assess the learning goals (objectives of our matrix) adopted by the Entomology Faculty. For each of the following questions, rank the student on the following scale:

1 = below average

2 = average

3 = good

4 = very good

5 = superior (upper 5%)

N/A = not able to judge

Ph.D. RESEARCH PROGRAM

Objective 1. Fundamental understanding of principles of Entomology

____ understanding of fundamental principles of Entomology

____ mastery of an area of specialization

Objective 2. Proficiency in oral and written communication skills

____ advanced oral communication skills

____ written communication skills

Objective 3. Development and conduct of original research

____ conception of a research and review of literature

____ knowledge and application of appropriate statistical techniques

____ originality of research

____ conduct of research

Comments _____

Appendix F: Guidelines for Assigning Credit for Students in ENTM 7010: Teaching Practicum

- Students enrolled in ENTM 7010 can receive credit (1- 3 hrs) for assisting in any course taught by Entomology faculty, at the discretion of and by permission of the course Instructor, **but must first assist in teaching of AGRI 1005 or ENTM 2001.**
- Teaching assistants can receive credit for the following types of activities:
 - teaching-related contact involving groups of students; examples include preparing and presenting lectures during scheduled lecture periods and leading study/review sessions.
 - grading
 - teaching-related contact involving individual students (tutoring, office hours); assumes that teaching assistant possesses mastery of material covered.
- As a guideline, students enrolled in Entm 7010 in past semesters have received 1 hour of credit for every 4 class periods for which the Assistant had primary responsibility (e.g., 1 hr of credit for every 4 lectures given or for every 4 lab periods coordinated)
- Material presented by the Teaching Assistant must be largely the product of their own efforts
- Teaching Assistants should not receive academic credit for activities that do not involve substantial intellectual engagement—for example, making copies or arranging specimens for a lab period
- If a student is to receive more than 1 hour of credit for teaching during a semester, the Courses and Curriculum Committee should be consulted to ensure appropriateness and uniformity in assigning credit for Entm 7010
- Students are encouraged to attend at least one CELT-sponsored workshop on teaching
- Written feedback from the Instructor must be provided to the Teaching Assistant at appropriate times during the semester
- Prior to receiving credit for ENTM 7010, the student's performance must be formerly evaluated by the instructor and either the Department Head or Graduate Advisor using this rubric.

Provide a concise description of the duties performed by the teaching assistant: _____

Use the following scale to describe the performance of the teaching assistant

(5= Strongly Agree; 4= Agree; 3= Undecided; 2= Disagree; 1= Strongly Disagree;

NA= Not Applicable)

_____ A. The teaching assistant was prepared for class

_____ B. The teaching assistant was well organized

_____ C. The teaching assistant communicated clearly

_____ D. The teaching assistant made efforts to improve his/her teaching

_____ E. The teaching assistant was effective in one-on-one interactions with students

_____ F. The teaching assistant was familiar with the subject matter of this course

_____ G. The teaching assistant was an effective teacher

_____ H. The performance of the teaching assistant met my expectations

Provide specific suggestions for improving the performance of this teaching assistant

Additional comments: _____

This evaluation has been reviewed by the teaching assistant and faculty mentor:

Teaching Assistant Date

Faculty Mentor Date