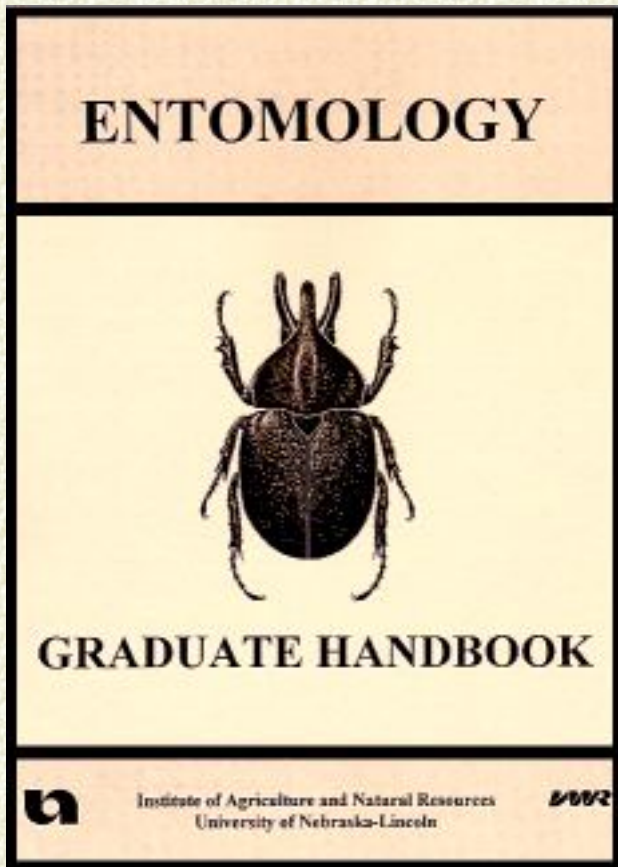


Nebraska EntWeb

University of Nebraska-Lincoln



Revised 5/10/05

[Printer Friendly Version of Graduate Handbook](#)

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[*Requirements for Ph.D. Degree*](#)

[*Checklist for Ph.D. Program*](#)

[*Financial Aid*](#)

[*Assistantships*](#)

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General Introduction

Welcome to the Department of Entomology at the University of Nebraska! This website has been prepared to introduce our Department to you, the new or prospective student. After a brief introduction to our community, the Department's history is reviewed, providing background information on the Department and the current courses that are offered. In addition, Departmental facilities that graduate students have access to, both on campus and at district centers, are described. The Graduate Program Procedures section explains the role of the graduate committee, the requirements for M.S. and Ph.D. degrees, and the comprehensive examination. The types of financial assistance that students may receive from the University are mentioned. And finally, a current list of Faculty and Department program areas are presented.

DEPARTMENTAL PHILOSOPHY TOWARD GRADUATE STUDENTS

The Department of Entomology regards graduate education as one of the most important activities undertaken by the Department. We are dedicated to producing highly trained, highly motivated, and highly successful M.S. and Ph.D. students. Faculty strive to provide an environment in which students can reach their potential as individuals and professionals to ensure graduates from our program can develop successful careers. Toward this end, we recognize graduate education must encompass many experiences in addition to course work. Graduate degrees in entomology are research degrees; consequently, it is important that you learn research skills and have experience in conducting research. At the M.S. level, much of your activity will be in learning the basic skills of scientific research and conducting research to obtain experience in the use of those skills. At the Ph.D. level, it is expected that your understanding of research will be significantly greater, and for this degree, original research,

in which you take a significant intellectual role, is expected.

In pursuing these goals, the Department recognizes that beyond course work and research experience, there are a number of other activities that will aid your professional development. Our philosophy is to regard graduate students as apprentices in the practice of science. As apprentices, it is important that you have the opportunity to participate in the broad range of activities that are conducted by professional scientists. Much of what we look for in development of our graduate students is not only growth in factual knowledge and research skills, but also a broader intellectual growth. By this we mean the ability to analyze and critique published information and to develop insights and understandings into novel findings. Much of this growth will occur through informal interactions with your major professor, with fellow graduate students, and with other faculty and staff in the Department. The greater the breadth of your graduate experience, the greater your potential for professional growth.

Expectations

The specific expectations regarding your class work and your research performance are described elsewhere in the handbook. It is important to note that as a member of the Department, we have other expectations that are more subtle. One expectation is that you become an active member of the Department rather than only a student in the Department. This involves participating in a variety of Departmental activities on both formal and informal levels; such as attending seminar, participating on Departmental committees, providing service to the Department through assistance in teaching, etc. Your involvement in these activities will strengthen your background and is an important aspect of good citizenship in the Department.

When we speak of graduate school as an apprenticeship, we recognize that for such an apprenticeship to be successful there must be careful mentoring of our graduate students. You will find that most professors in the Department regard graduate student mentoring as their highest priority. The focus of this mentoring is, of course, through your major professor and secondarily through your supervisory committee. It is important that you work with your major professor and your committee to make your graduate experience as mutually profitable as possible. There are other important avenues of mentoring within the Department including other professors and associations with fellow graduate students. These are very important activities, and you need to recognize their importance early in your career.

As you develop through your graduate program, a number of experiences and opportunities will present themselves. Students in the Department routinely attend professional scientific meetings, make paper presentations, give seminars in other departments, conduct classes in local elementary and high schools, assist in teaching courses, and otherwise contribute to the goals of the Department. Also, there are many opportunities for recognition of graduate

student activities. These include such things as travel grants to scientific meetings, fellowships, scholarships, honorary societies, and teaching and research awards both on campus and through the Entomological Society of America. Our hope is that you will take advantage of these activities during your tenure as a graduate student in the Department.

Ultimately, you must take responsibility for your own graduate education. You are responsible for ensuring that you meet Departmental and Graduate College deadlines and requirements for your degree. Although meeting these requirements is important, it is not all you should gain from your graduate experience. We will provide you other opportunities for growth, but you must be prepared to accept these opportunities and their associated responsibilities and obligations. The professors, staff, and fellow graduate students in the Department are willing and eager to work with you to have as successful a graduate experience as possible. We look to having you enter the Department as an apprentice and leave as a colleague.

COMMUNITY

Nebraska

[Nebraska](#) is located in the east-central region of the Great Plains. Bounded by the Missouri River on the east, the state offers a variety of scenery from the farming area in the east to the rolling Sandhills and the mountainous qualities of the Wildcat Hills and Pine Ridge area in the western panhandle. In total, the state has an area of 77,407 square miles.

Nebraska was admitted to the Union on March 1, 1867, as the 37th state. The state has had five capitols: two territorial capitols in Omaha and three state capitols in Lincoln. The present capitol is an internationally-recognized architectural achievement. Built on a pay-as-you-go basis, the capitol cost approximately 10 million dollars when it was completed in 1932. State senators are elected to the Unicameral, Nebraska's unique one-house (Senate) legislature, on a nonpartisan basis.

Much of Nebraska's industrial base is agriculturally related. Sales of livestock items such as cattle, hogs, and dairy products account for almost two-thirds of Nebraska's farm income; whereas the major crops (corn, soybeans, wheat, and sorghum) account for the other one-third. Food processing and manufacturing of durable goods such as capacitors, electrical machinery, farm equipment, metal buildings and automotive parts are principal industries. Travel and tourism also are important economic sectors.

The population of Nebraska in the 2000 census was 1,711,263. Omaha and Lincoln, the largest and second largest cities, respectively, are located in the eastern third of the state where over 78 percent of the population resides.

Lincoln

[Lincoln](#), the capital of Nebraska, has a population of approximately 250,000 and offers some of the finest cultural, historical, and recreational opportunities in the region. There are several art galleries in Lincoln including Sheldon Memorial Art Gallery, which houses one of the nation's finest collections of 20th century American art. In addition to their own musical and dramatic productions, the University of Nebraska and other major colleges enhance Lincoln's youthful vitality by providing a variety of nationally and internationally known ballets, symphonies, choral performances, theater troupes, and foreign films.

The Lied Center for the Performing Arts on City Campus is the focus of many cultural events in Lincoln. A number of night spots in downtown Lincoln regularly host live jazz, rhythm and blues, and folk music, including artists from throughout the United States. Historical attractions abound within the city and nearby surrounding areas which may be enjoyed throughout the year. The city has over 5,000 acres of parkland, with swimming pools, golf courses, and tennis courts around the city. The Lincoln Children's Zoo with the Botanical Garden is considered to be one of the finest children's zoos in the nation.

Many sporting events, including Big Red football, the Junior Olympics, AAU swimming and track meets, NCAA Gymnastics, National Roller Skating Championships, and horse racing are hosted by the city of Lincoln.

[Lincoln](#) is large enough to provide superb hospitals, shopping facilities, restaurants, and other services, but small enough to maintain a community atmosphere.

THE UNIVERSITY OF NEBRASKA-LINCOLN

The [University of Nebraska-Lincoln](#) is Nebraska's largest educational institution. Founded as a land-grant university in 1869, UN-L's primary mission has three aspects: teaching, research, and extension. UN-L also actively supports the fine arts and various athletic programs.

UN-L consists of eleven undergraduate colleges and a [Graduate College](#) with an enrollment of approximately 24,000 students. The undergraduate colleges are Agricultural Sciences and Natural Resources, Architecture, Arts and Sciences, Business Administration, Division of General Studies, Engineering and Technology, Hixson-Lied College of Fine and Performing Arts, General Studies, Education and Human Sciences, Journalism and Mass Communications, Nursing, and Public Affairs and Community Service. These colleges offer bachelor degrees in more than 100 subject areas. The Graduate College offers many programs which lead to masters, professional, specialist, and doctoral degrees. The University has two campuses; the City Campus and the [East Campus](#). The City Campus is the main campus where the University's administration is located and the majority of

undergraduate classes are held. East Campus classes are primarily related to agriculture but also include the Colleges of Law and Dentistry, and the Barkley Memorial Center for speech and hearing.

The foundation for graduate education is research. The faculty and students at UN-L are in the forefront of developing new technology and remain aware of the rapid, expanding knowledge in many fields such as entomology.

One of the University's major commitments is disseminating newly acquired knowledge. [The Cooperative Extension Division](#), and [Extended Education and Outreach](#) are two important programs conducted by UN-L faculty and staff to educate the people of Nebraska.

The athletic program at UN-L has gained national prominence. The Nebraska Cornhusker football team has brought in some of the best teams in the nation to compete in Memorial Stadium. The men's basketball, baseball, track, swimming, wrestling, and gymnastic teams and the women's volleyball, track, gymnastics, and softball teams are strong conference, and often national, contenders. A wide variety of intramural athletic programs also are available to students.

On the cultural side UN-L offers an array of activities. The Sheldon Memorial Art Gallery and Sculpture Garden, Kimball Recital Hall, Temple Theater complex, University of Nebraska State Museum, and the Center for Great Plains Studies Art Collection are among the cultural attractions available.

HISTORY OF THE DEPARTMENT OF ENTOMOLOGY AND ITS CURRICULUM

The University of Nebraska first opened its doors to students in 1871. The following year insects were recognized as being worthy of study, and courses were added to the curriculum. The 1872-73 catalogue stated, "The Zoology of Agriculture will include the habits, diseases and treatment of livestock, the anatomy of the horse, the cow, the sheep and other farm animals, as well as a special consideration of insects injurious to vegetation." Entomology also was listed as one of the courses being offered.

Samuel Aughey, Professor of Natural Sciences, handled the earliest instruction in entomology. However, only a few students took Entomology courses until interest in Entomology increased in 1895-96. During the same year, Conway G. McMillan obtained a Masters degree with a major in Geology and minor in Entomology, the first graduate degree from UNL.

In 1888, Lawrence Bruner, a recognized Nebraska entomologist, was appointed to the University staff and over the next few years began teaching. However, it was not until 1895 that the Regents established the Department of Entomology and Ornithology with Lawrence

Bruner as its Chairman. For several years, Bruner handled the Department with whatever assistance he could secure from his "special students" as they pursued their entomological studies. This assistance was performed in both the instructional and the experimental activities of the Department.

Several of these early students became prominent entomologists and held responsible positions in many areas of the United States. Among them were: Harry G. Barber, Walter D. Hunter, J.C. Crawford, M.A. Carriker, Jr., W. Dwight Pierce, Paul R. Jones, William H. Goodwin, Harry S. Smith, Myron H. Swenk, Ralph W. Dawson, Leroy M. Gates, and Clarence E. Mickel. Others who came along a few years later and became distinguished professionally included: Cornelius B. Phillip, Robert H. Nelson, and Orlando S. Bare.

The courses offered in 1895 were Preliminary (or General) Entomology, Economic Entomology, Systematic Entomology, Horticultural Entomology, and Domestic Entomology. As the Department's research program expanded and teaching staff grew, basic courses were updated and new courses added, with some courses combined or dropped as conditions warranted.

Presently, the graduate courses offered by the Entomology Department are:

Advanced Insect Physiology	Insect Ecology
Advanced Topics in Entomology	Insect Physiology
Aquatic Insects	Insect Toxicology
Becoming a Professional Scientist	Urban and Industrial Entomology
Biology and Classification of Insects	Masters Thesis
Biosystematics and Nomenclature	Pest Management Systems
Doctoral Dissertation	Pesticide Dissipation on Soils and Plants
Field Entomology	Research in Entomology
Insect Control by Host Plant Resistance	Seminar in Entomology
Independent Study in Entomology	Veterinary Entomology

Research interests, programs, and backgrounds of the faculty are diverse and allow students to pursue many avenues of scientific investigation. In the early years, taxonomic and systematic studies were the most common subjects for advanced degrees. Up until 1950, almost 60 percent of the submitted theses were in these subject areas. A wider choice of subjects has been investigated in the past 50 years because of the larger teaching staff and expanded research programs. A current list of Faculty and Department program areas are presented in the [department brochure](#).

LAWRENCE BRUNER ENTOMOLOGY CLUB

The Lawrence Bruner Entomology Club, named after Lawrence Bruner - the first Department Chairman, is a student/faculty organization. The Club has five student and two faculty officers. The student positions are president, vice-president, secretary, treasurer, and student representative. These officers are elected each April to serve a one-year term. The two faculty officers serve as advisors. One faculty advisor is elected every year for a two-year term. The Club meets monthly throughout the school year.

The Club is involved in numerous activities, including presentations at Bug Bash, Pioneers Park Nature Center, and at grade schools to promote interest in Entomology and the University. The Club has sponsored speakers, and purchased books for the department library which the Club maintains. Social gatherings such as the Departmental picnic, international potluck, golf tournament, Halloween parties, insect movie nights, and canoeing/collecting trips are sponsored by the Club. The Club has had a coed volleyball team that has competed in local tournaments.

Financially, the Bruner Club is self-supporting. The main sources of income are from T-shirt and honey sales.

The Club's members are active in professional organizations such as the Entomological Society of America, where they present papers or symposia and regularly participate in the Linnaean Games, an insect trivia contest.

FACILITIES AVAILABLE TO ENTOMOLOGY GRADUATE STUDENTS

Department of Entomology

202 Plant Industry Building, East Campus

University of Nebraska, Lincoln, NE, 68583-0816; (402) 472-2123

The Department of Entomology is located on the East Campus of UN-L in the Plant Industry Building where it occupies the second and third floors. Also located on the East Campus is the Insectary, which includes an urban pest laboratory, Biochemistry Hall, USDA-ARS livestock insect laboratories, and greenhouse facilities. Many computers are located throughout the Department, including the graduate student office. Many faculty members make personal computers available for use by their students.

Other East Campus Facilities

The Department of Entomology is conveniently located near several important facilities: the C.Y. Thompson Library, the Biometrics Center in Hardin Hall, and the East Campus Union. The C.Y. Thompson Library collections emphasize agriculturally related material. Miller

Hall has an operating center for the University of Nebraska Computer Network located on the first floor. The East Campus Union has a bookstore, a cafeteria, recreational areas, and meeting facilities.

RESEARCH FACILITIES

Research facilities in the Department are assigned to staff members on the basis of research projects. Graduate students have access to these facilities through their advisors.

The Entomology Department conducts limited field research at the East Campus location. Most field research is conducted at the University of Nebraska Agricultural Research and Development Center, located near Ithaca, or at district centers located at Lincoln, Scottsbluff, North Platte, Clay Center, and Concord. These district centers are staffed by both research and extension specialists from various disciplines.

Systematics Research Collections

[University of Nebraska State Museum](#)

W436 Nebraska Hall

University of Nebraska, Lincoln, NE, 68588-0514; (402) 472-2614

The research collections in entomology, established over a century ago, contain about 2 million specimens and are ranked among the top 20 collections in the United States. The Great Plains is especially well-represented as are holdings from the Neotropics. A large fluid collection is also maintained, and the reprint collection numbers about 15,000 titles dealing primarily with systematics. Working space and microscopes are available for visitors to the collections.

[University of Nebraska Ag Research and Development Center](#)

Rt. 1, P.O. Box 63A, 1071 County Road G, Ithaca, NE, 68033; (402) 624-8000

Approximately 80 acres of land, 20 of which can be irrigated, are currently assigned to Entomology. Equipment and facilities include: soil washing facilities, research laboratories, storage buildings, shop areas, and a full complement of small plot farm implements. Most of the entomology research conducted at the ARDC pertains to the biology, ecology, and management of field crop insects, turfgrass arthropods, and insect pests of livestock. Other activities focus on research and extension programs in apiculture and landscape entomology. The department also has limited access to large crop acreages on the 9,500-acre ARDC facility.

[Panhandle Research and Extension Center](#)

4502 Avenue I, Scottsbluff, NE, 69361; (308) 632-1230

The Panhandle Center is unique from other centers by having three satellite field laboratories associated with it: the Scottsbluff, the High Plains, and the Northwest Agricultural Laboratories. Access to irrigated and dryland field plot areas is available at all locations. The Center itself has 320 acres for research plots and has entomology laboratory, insect rearing, and greenhouse space. Graduate student office space is available along with housing facilities at the Scottsbluff and High Plains Agricultural Laboratories. Recent research emphasis has been on pests associated with wheat and specialty crops such as sugar beets and dry beans.

West Central Research and Extension Center

461 West University Drive, North Platte, NE, 69101; (308) 696-6740

North Platte has excellent facilities with work space and equipment. Graduate students have adequate housing facilities available, are provided with office space, and have access to office equipment. Growth chambers are available for controlled environmental studies and rearing rooms provide space for insect rearing. Pastures, swine facilities, and feedlots are located at the Center. A screened fly barn permits controlled studies in livestock Entomology. The University also maintains the Gudmundsen Research Laboratory, a 13,000-acre ranch near Whitman, NE, where a cattle herd of 750 head is available for livestock studies.

South Central Agricultural Laboratory

P.O. Box 66, 842 Road 13, Clay Center, NE, 68933; (402) 762-4403

The South Central Ag Laboratory is located four miles west of Clay Center on State Spur 18D. The Center office building adjoins the USDA Roman L. Hruska Meat Animal Research Center and the Great Plains Veterinary Education Center. Office and laboratory space is available for entomology research. Limited dormitory space for student housing is available through GPVEC. The SCAL Research Farm, located four miles north of the office building, is well equipped for field research. Currently 640 acres are being used for research, including both dryland and irrigated crop production. Entomology programs focus on insect pest management and biological control of corn and grain sorghum insects.

Northeast Research and Extension Center

601 East Benjamin Avenue, Suite 104, Norfolk, NE 68701-0812; 402-370-4000

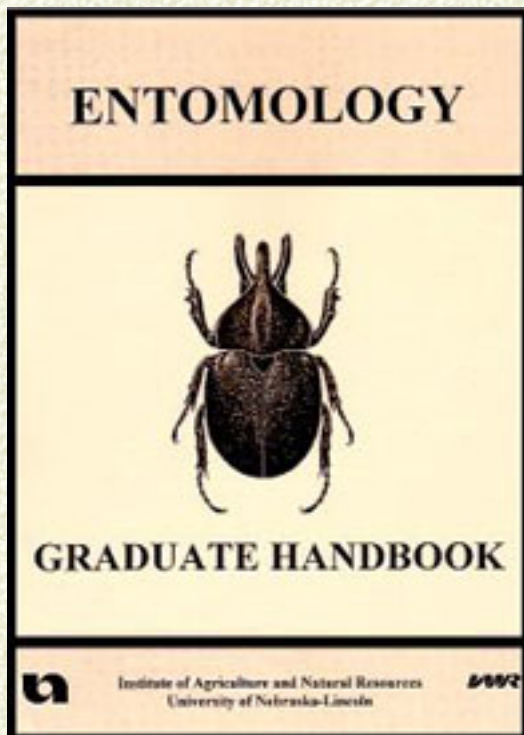
The Northeast Research and Extension Center is located in Norfolk.

Haskell Agricultural Laboratory

57905 866 Road, Concord, NE 68728; 402-584-2234

Haskell Agricultural Laboratory is well equipped to conduct applied entomological field

studies. In recent years, research has primarily focused on European corn borer, soybean arthropods, and chemigation. The Center houses several chemigation units, including a four-tower overhead center pivot and a six-tower lateral overhead irrigation system. The Center also houses the necessary high clearance ground application equipment necessary for insecticide research. A modest rearing facility is operable, and a shop is available for equipment manufacture, storage, and upkeep. Graduate student study space is minimal but adequate.



Graduate Admission Information and Program Procedures

Overall procedures and policies in the Department of Entomology comply with those established by the University of Nebraska Graduate College and administered by the [University of Nebraska-Lincoln Graduate Studies](#). However, in some particulars, Department requirements may be more stringent than those of the Graduate College.

Students seeking admission to the M.S. or Ph.D. program must hold a B.S. or B.A. degree from an accredited college or

university. Baccalaureate course work must include chemistry, physics, mathematics, biology, and introductory entomology. A limited number of deficiencies may be made up during the graduate program, typically during the first semester in residence, and do not count toward their program of study.

Applications must include an application form, letter of intent (indicating your background and interests), transcripts, and three letters of recommendation (a checklist of required application materials is provided on page 18). An application file must be complete before an applicant can be considered for admission.

Once the application is complete, the three-member Department of Entomology Graduate Committee reviews the file to determine if the applicant meets requirements for admission. If the applicant is acceptable, the committee circulates information about the applicant to the

faculty. Only if a faculty member agrees to serve as advisor is the applicant accepted into the graduate program. Faculty must have adequate resources to cover research expenses. Many qualified applicants fail to be accepted because faculty have limited resources and only a limited number of students they can advise.

Minimum Entrance Requirements

M.S.: Undergraduate G.P.A. of 2.50 or better - Full Graduate Standing. A G.P.A. of less than 2.50 will be considered on an individual basis for provisional admission.

Ph.D.: With few exceptions, the M.S. Degree is required. The Graduate Committee will not normally admit B.S. students directly into a Ph.D. program.

International Studies: A TOEFL score of 550 (213 computer-based) or better is required to be admitted to the Department Graduate Program. Students with scores between 500-550 may occasionally be considered for provisional admission.

Students applying for admission to the Department of Entomology are highly encouraged to submit Graduate Record Examinations scores. Although the GRE is not an absolute departmental requirement, it can be an extremely important factor influencing our decision to accept students into our graduate program. The decision to accept a qualified applicant resides with the faculty member who wishes to become responsible for directing that student's program. In the event no staff member wishes to accept responsibility for a prospective student, the student is not recommended for admission.

Role of the Department Graduate Committee

A Departmental Graduate Committee is appointed by the Dean of Graduate Studies following recommendations from the Department Head. The Graduate Committee consists of two members and a Committee Chair appointed by the Department Head. The Chair of the Graduate Committee should have served a term on the Committee prior to becoming Chair. One member is rotated in cycle with the publication of the Graduate Studies Bulletin. Because our Department offers a Ph.D. degree, a majority of the Graduate Committee must be Faculty Fellows. The Graduate Committee serves as a resource body to students and faculty, and formulates and recommends changes in policy pertaining to curricula and departmental requirements for advanced degrees. The Chair serves as liaison between the Department and the Office of Graduate Studies, conducts all Departmental business relating to graduate students and graduate programs, and monitors compliance with Departmental and Graduate College regulations. Letters of acceptance and official offering of

assistantships will come from the Chair of the Graduate Committee following recommendations from the Graduate Committee and the faculty member agreeing to serve as major advisor.

All correspondence regarding graduate programs, including requests for waivers of requirements, should go through the Graduate Committee Chair, and not directly to the Graduate College.

Role of the Supervisory Committees

The faculty member recommending admission of an applicant will serve as Chair or Co-Chair of the Supervisory Committee. It is the Chair's responsibility to see that all activities relating to the student's graduate program comply with the regulations and procedures of the University and the Department.

During the first semester in residence, the candidate, in conjunction with her/his faculty advisor and with the approval of the Department Head, will recommend members of their supervisory committee for the M.S. or Ph.D. degree.

M.S. Supervisory Committee. A Supervisory Committee for the M.S. degree consists of not less than three Graduate Faculty Members or Fellows (one member of the Supervisory Committee must be a Graduate Faculty Fellow).

Ph.D. Supervisory Committee. The Supervisory Committee for the Ph.D. degree consists of at least four Graduate Faculty Fellows, and all members must either be on the Graduate Faculty or be non-Graduate Faculty approved to perform specified Graduate Faculty duties. At least one Graduate Faculty Fellow external to the academic department or area in which the doctorate is to be granted must be included on the Supervisory Committee. If a minor is desired for a Ph.D., a faculty member from the appropriate department must be a member of the Committee. When the representative of the minor department is a Graduate Faculty Fellow, he/she may also serve as the outside representative.

Supervisory Committee Meetings

Students must meet with their committee during the first semester in residence to plan their course of study. Specific information regarding preparation for the meeting are listed in the M.S. and Ph.D. requirement sections.

Both M.S. and Ph.D. students must meet with their committee during the second semester in residency to: (1) confirm the proposed course of study, and (2) discuss in detail the student's

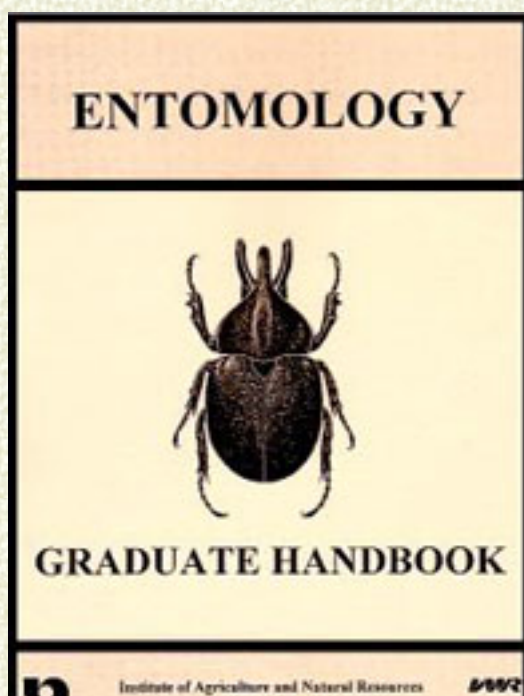
research proposal. Specific information is included in the M.S. and Ph.D. requirement sections.

After the first two committee meetings, all M.S. and Ph.D. committees will meet annually to review the student's progress. The Chair of the Supervisory Committee must submit a brief written report to the Chair of the Department Graduate Committee summarizing each meeting. The report will be placed in the student's file. The form used by the Department Graduate Committee to annually track student progress is provided on page 34.

Satisfactory Progress Requirement

In order to meet the Department of Entomology Satisfactory Progress requirement, Graduate Students must meet all department graduate program requirements, demonstrate progress on their research program, and make B's or better in all courses. If a student receives a grade of C or less in any course, the student's Supervisory Committee must meet and review the academic progress of the student. Recommendations are made by the Supervisory Committee to the Department Graduate Committee regarding the student's continuation in our graduate program. Note that the Department standards for satisfactory progress are more stringent than those of the Graduate College.

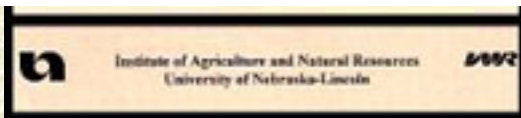
The Department Graduate Committee meets once a year to review graduate student files and monitor compliance with Graduate College and Departmental rules.



Requirements for the Masters Degree

Master Degree Options

The Graduate College offers the degree of Master of Science under three options. Option I, the only option requiring a thesis, should be taken by individuals who are preparing for careers in research and scholarly work or in college or university teaching. Only Option I students may receive Graduate Research Assistantships.



Option II offers students a wider range of courses than permissible under Option I and no thesis is required. Option III permits the substitution of more intensive work in

advanced courses. Typically, only students having M.S. degrees with a thesis are admitted into Ph.D. programs. A student may not change options for the M.S. degree after having been admitted to Candidacy.

Option I

Students seeking an M.S. in Entomology generally follow Option I. Under this option a student must earn a minimum of 30 semester hours of credit, consisting of at least 22-24 semester hours of regular course work, and present a thesis equivalent to 6-8 semester hours. At least one-half of the required course work, including thesis, must be taken in the major subject area. The remaining work may be taken as supporting courses or in a minor. A formal minor requires a minimum of nine semester hours. Eight credit hours, in addition to the thesis, must be earned in courses open exclusively to graduate students (900 level or 800 level without 400 or lower counterparts). A checklist of M.S. Option I requirements is presented on page 24.

The student, in consultation with the major advisor, selects the subject of the thesis from the candidate's field of major interest. The thesis topic must be approved by the Departmental Graduate Committee (in the Entomology Department, the Graduate Committee delegates this responsibility to the Supervisory Committee). The thesis should reveal a capacity to carry on independent study or research and should demonstrate the student's ability to use the techniques employed in her/his field of investigation. The thesis must conform in style and form to Graduate College specifications. Examples may be checked out from the Entomology Office or examined in Love Memorial Library.

Option II

Under Option II, a student must earn a minimum of 36 semester hours of credit in courses representing a major and either one or two minors. A thesis is not required for students selecting Option II. A program consisting of a major and one minor must include not fewer than 18 hours in the major and 9 hours in the minor. If two minors are selected, the major must total at least 15 hours and the minors at least 9 hours each. In either case, at least 12 of the 36 hours must be earned in courses open exclusively to graduate students (900 level or 800 level without 400 or lower counterparts).

Option III

Under this option, a student must earn a minimum of 36 semester hours of credit, at least 18

of which must be earned in courses open exclusively to graduate students (900 level or 800 level without 400 or lower counterparts). This program must include not fewer than 18 hours in the major, and a thesis is not required.

Core Curriculum Courses

To meet core curriculum requirements, M.S. students must take, or have taken, Biology and Classification of Insects and a second course selected from either Insect Physiology or Insect Ecology. In addition, M.S. students are required to take two credit hours of seminar (one must be Entomology 905). These seminars include formal presentations by the students.

Students may substitute "Significant Teaching Assistant Experience" or focused journal club experience for one of the required MS or PhD seminars. Either substitution must be approved by the Supervisory Committee. To qualify for "Significant Teaching Assistant Experience," the student must enroll in 1 hour of independent study with the course instructor and receive a passing grade. A student must demonstrate that both of the following teaching activities have taken place at least 3-5 times during the course of a semester: 1) presenting original lectures (=synthesizing information) to students and presenting it in a classroom format and 2) preparing original laboratory materials (e.g., handouts, collections, PowerPoint presentations). "Original" in this context does not include downloaded information from the World Wide Web or xeroxes of material developed by secondary parties.

First Meeting With the M.S. Supervisory Committee

The objectives for the first committee meeting of M.S. students are to identify any deficiencies, establish a program of courses (including a minor, if desired), and define a research program. To meet these objectives, the student needs to prepare some preliminary information consisting of three parts before the first committee meeting.

1. Develop a list of the student's undergraduate course work emphasizing all science, mathematics, and any other supporting courses.
2. Develop a list of proposed courses to fulfill degree requirements with proposed courses listed in chronological order by semester. The student should ensure that the criteria listed under "Requirements for the Masters Degree" are met.
3. Prepare a general statement of the problem to be researched and briefly describe the objectives to be accomplished.

Second Meeting with M.S. Supervisory Committee

M.S. students must meet with their committee during the second semester in residency.

There are two main objectives for this meeting. The first is to confirm the proposed course of study; if changes in courses occur, reasons for the change should be supplied. The second is to evaluate the research proposal. The research proposal will include:

1. a literature review;
2. a specific statement of the research problem;
3. a set of specific objectives to be accomplished, including statements of hypotheses;
4. materials and methods needed to accomplish each objective; and
5. literature cited.

If a student enters school in January and is planning to perform extensive field research that summer, an expanded research proposal is needed for the first semester committee meeting.

Annual Meetings with M.S. Supervisory Committee

After the first two committee meetings, M.S. committees will meet annually to review the student's progress. This meeting will include a written summary of the student's progress in course work and thesis research. Any proposed changes in course work or research direction must be approved by committee action and recorded prior to the change.

M.S. Comprehensive Examinations

A written comprehensive examination and an oral examination are required by the Entomology Department. The objectives of these examinations are for the student to demonstrate proficiency in general entomology and biology, and to apply entomological and biological principles and information in problem solving situations.

The written comprehensive examination for M.S. students consists of a standardized entomology exam developed and administered by the Department, and a specialized exam developed by the student's Supervisory Committee. The Supervisory Committee will function as the Examination Committee that is required by the Graduate College. The written comprehensive exam must be taken within ten months prior to the completion of degree requirements.

The oral examination is essentially a defense of the thesis and is conducted in a manner similar to a seminar. The examination, sometimes called the thesis defense, consists of two parts. In the first phase, the student presents research results to an open audience; faculty, students, and other interested individuals may attend and ask questions. In the second phase, the student and her/his Supervisory Committee complete the examination during a closed session, but other faculty may attend.

Residency and Time Requirements

A candidate for an Option I Masters Degree must complete 10-12 semester hours of required credit in regularly scheduled campus courses, excluding credit in thesis research. Candidates for Option II or III Master Degrees must complete at least 18 hours in regularly scheduled campus courses. At least one-half of the work for a Masters Degree must be in the Department or area constituting the student's major. The work required for a Masters Degree must be completed within six consecutive calendar years. Upon the recommendation of the Department, a graduate student may apply to the Dean of Graduate Studies for permission to take a special examination, or the current semester final examination, in courses for which graduate credit has been recorded and is more than six years old, counting from the last day of classes for the semester or term in which the student registered for the course. However, the Graduate Council has adopted the general principle of denying permission to validate credits more than 10 years old. Courses may be validated up to the 10 years limit, counting from the last day of classes for the semester or term in which the student registered for the first course that is used on the program. A report of the results of the examination, which is prepared, given and graded by the Department, is filed in the Graduate Studies office. Unless a grade of B is obtained in the examination, the student is required to take additional work, the amount and nature of which is determined by the major advisor and the Dean of Graduate Studies. The student is ultimately responsible for meeting all time requirements and deadlines.

MASTERS DEGREE DEADLINES

ITEM	DEPARTMENT	DEADLINE*
Memorandum of Courses **	Office of Graduate Studies 1100 Seaton Hall	Must submit prior to completion of over one-half of the required course work. Incompletes and No Reports count as completed courses.
Application for Degree **	Graduation Services 107 Admin. Bldg	Due approximately three months prior to graduation. If not filed, a diploma will not be ordered and graduation will be delayed.

Final Examination Report for the Masters Degree**	Office of Graduate Studies 1100 Seaton Hall	If an oral exam is scheduled, this form must be submitted at least four weeks (three weeks in summer) prior to the date of the oral exam.
Receipt of form generates the final graduation check. Form should include the date and time of the exam and names of oral exam committee.		
Incomplete Grades and Revalidation of Courses		Due approximately six weeks prior to graduation. All incomplete grades listed on the Memorandum of Courses (except thesis) and all Revalidation of Courses must be cleared with a satisfactory grade.
Preliminary Copy of Masters Thesis	Office of Graduate Studies 1100 Seaton Hall	Due at least two weeks (one week in summer) prior to the oral exam date.
Written Comprehensive Examination and/or Option II Paper Results	Office of Graduate Studies 1100 Seaton Hall	Last day is approximately two weeks prior to graduation.
Oral Examination		Last day to hold exam is approximately two weeks prior to graduation.
Deposit Thesis***	1)Office of Graduate Studies, 1100 Seaton Hall; 2)106 Love Library 3) Dept. of Entomology	Due approximately one week prior to graduation.
Pay Binding Fee	Cashier Window 110 Admin. Bldg.	Due approximately one week prior to graduation.
Deposit Final Examination Report Form	Office of Graduate Studies 1100 Seaton Hall	Due approximately one week prior to graduation.

* For exact dates, refer to a current copy of [Masters Degree Deadline Dates](#) distributed by the Office of Graduate Studies.

** Form is also available in the Entomology Main Office.

*** Theses can be engraved and bound at the East Campus Union Copy Center.

CHECKLIST FOR GRADUATE STUDY IN ENTOMOLOGY MASTERS DEGREE (OPTION 1)

FIRST SEMESTER IN RESIDENCY

1. **Form advisory committee** - The advisory committee must consist of at least three members, one of whom is a Graduate Faculty Fellow; the advisory committee also serves as the examining committee
2. **Hold First Committee Meeting**

Prepare list of background undergraduate courses for advisory committee

Identify courses to be taken to remove deficiencies (if any). (These courses will not count toward the masters program.)

3. **Prepare Memorandum of Courses:**

At least 30 total credit hours (beyond the B.A. or B.S.)

At least 22 (22-24) credit hours of courses. (This is a department requirement; Graduate College allows 20-24 credit hours.)

6-8 credit hours for masters thesis. (The department will only allow 6-8 hours to be included on Memorandum of Courses, but additional hours may be taken; Graduate College allows 6-10.)

At least half of all hours in major area

The Memorandum of Courses must be filed before letter grades, no reports, or incompletes are received for more than half of all credit hours in the student's program

8 credit hours in courses open exclusively to graduate students (900- or 800-level courses without 400 counterparts)

Must take Entomology 800 (Biology and Classification)

Must take a minimum of one of the following courses:

Entomology 801	Insect Physiology
Entomology 804	Insect Morphology
Entomology 806	Insect Ecology

Must take two credits of seminar (typically Entomology 905) (Seminar must include a formal [ca. 30 minutes] presentation.)

Minors (which are optional) require 9 credit hours in the minor department and a member of the minor department should be on the advisory committee

4. Indicate to the advisory committee the general area of research and provide a brief description of proposed research objectives. A brief description of the research topic or field is required on the Memorandum of Courses
5. After meeting, the Memorandum of Courses must be signed by:
 - Major Professor(s)
 - Graduate Committee Chair
 - Member of Graduate Committee from Minor Department
 - Dean of Graduate Studies
6. After a copy of the approved Memorandum of Courses is returned from the Graduate College (to the major advisor), a signed copy should be placed in the student's graduate file in the main office.

SECOND SEMESTER OF RESIDENCY

1. Hold Second Committee Meeting

Prepare formal research proposal for presentation to committee. It should include:

Review of pertinent literature - although the literature review will need to be expanded as research progresses, a thorough basic knowledge is necessary to develop sound objectives and a strong plan of attack. The review should be sufficiently complete at this point to guarantee that the committee is comfortable with the student's knowledge of the research area.

Statement of research question - what is needed and what new knowledge will

be contributed?

Research objectives - define the specific research objectives to address the research question.

Procedures - for each objective, describe the specific experimental procedures to be followed including experimental design and analysis, schedule of activities.

Put revised research proposal (revised in response to committee suggestions) in student folder

ANNUALLY AFTER THE FIRST YEAR

1. Hold Committee Meeting (as needed but at least annually)

Inform committee of progress in courses and research. Make any necessary modifications to research as needed (and to the program of study if absolutely necessary; changes will require approval from the Graduate College). A written summary of research findings to date is encouraged

2. The major advisor should send a memo to the Graduate Committee Chair indicating that a meeting was held and whether satisfactory progress has been made to date. This will be included in the student's file in the main office. Copies of any written summaries should also be given to the Graduate Committee.

BEFORE GRADUATION

1. File completed [Application for Degree](#) and \$25 with [Graduation Services](#)

o Take and Pass Written Comprehensives

Written exams must be taken within the 10 months prior to graduation, and at least one week before the oral exam

Take and pass the departmental standard entomology exam or pass the Entomology Certification Board exam

Take and pass a specialized exam from the advisory committee

Take and pass a specialized exam for the minor (if required, this can be waived by the Minor Department)

2. File [Final Examination Report for Masters Degree](#) (available in the main office)

Send to the Office of Graduate Studies at least 4 weeks (3 in summer) before final oral (after routing through Major Advisor and Graduate Committee Chair for signatures)

- Submit signed Final Examination Report for Masters Degree and copy of thesis to the Graduate College

3. **Give Copy of Thesis and Abstract to Examination (=Advisory) Committee;** reference: [Guidebook for Preparing Thesis or Dissertation](#)
Two weeks (1 in summer) before oral exam

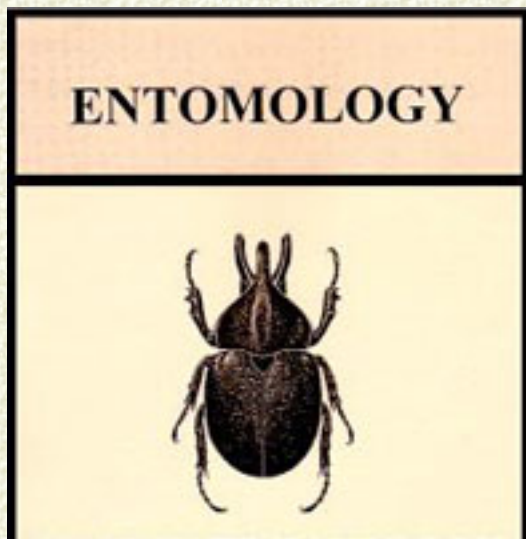
4. **Take and Pass Oral Exam**

Give thesis seminar to the department and defend the thesis with the examination (=advisory) committee. Non-thesis related questions also may be part of this exam at the committee's discretion.

5. **Deposit one complete copy of the thesis with the Department**

TIME LIMITS

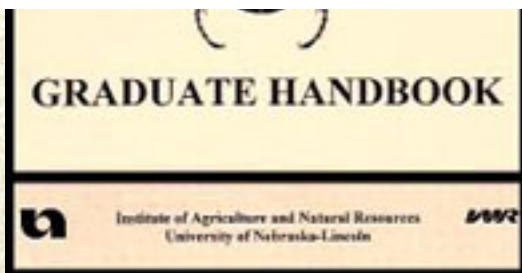
The work for the Masters Degree must be completed **within 6 consecutive years**. Upon departmental recommendation to the Dean of Graduate Studies, students may take examinations (and must receive a B or better) to receive credit for courses more than 6 years old, but **permission is never granted past 10 years**.



Requirements for the Degree of Doctor of Philosophy

Core Curriculum Courses

To fulfill core curriculum requirements, Ph. D. students must take, or have taken, Biology and Classification of Insects and two other courses selected from either Insect Physiology, Insect Ecology, or Insect



Morphology. In addition, Ph.D. students are required to take three credit hours of seminar, which must include formal presentations. One M.S. presentation seminar course may be counted toward the Ph.D. seminar requirement.

Students may substitute “Significant Teaching Assistant Experience” or focused journal club experience for one of the required MS or PhD seminars. Either substitution must be approved by the Supervisory Committee. To qualify for “Significant Teaching Assistant Experience,” the student must enroll in 1 hour of independent study with the course instructor and receive a passing grade. A student must demonstrate that both of the following teaching activities have taken place at least 3-5 times during the course of a semester: 1) presenting original lectures (=synthesizing information) to students and presenting it in a classroom format and 2) preparing original laboratory materials (e.g., handouts, collections, PowerPoint presentations). “Original” in this context does not include downloaded information from the World Wide Web or xeroxes of material developed by secondary parties.

First Meeting with Ph.D. Supervisory Committee

The objectives of the first meeting include identifying any deficiencies, establishing a program of courses (including a minor, if desired), determining how the language/research tool, collateral field, minor requirement will be met, and defining a research program. The student needs to assemble preliminary information to accomplish the following four objectives:

1. A list of background courses is required and should include relevant undergraduate and graduate courses. The Supervisory Committee uses the graduate course list to determine how many credits the student can transfer from their M.S. degree and to help the student select appropriate courses to provide a sound program of study. Thirty hours (counting a maximum of eight hours thesis work) are accepted from the M.S. degree. If the student earned more than 30 hours during her/his M.S. program, the Supervisory Committee may accept up to 15 additional hours towards the Ph.D. degree.
2. A list of proposed courses (listed chronologically by semester) is required and should satisfy the following requirements: (1) graduate work must total at least 90 hours, including dissertation; (2) at least 45 hours and half of all total hours must be completed after the proposed program is approved by the Graduate Office; (3) at least one half of the course work, including dissertation, should be taken in Entomology (this includes hours taken during the M.S. program); (4) three semester hours of formal presentation seminars are required; and (5) if a minor is desired, at least 16 hours must be taken, and at least 6 hours must be from courses open exclusively to

- graduate students (900 level or 800 level without 400 or lower counterparts).
3. A Ph.D. candidate must satisfy the language, research tool, minor, or collateral field requirement. In the Department of Entomology, a minor will meet the language/research tool requirement. If courses are taken to fulfill the collateral field requirement, they are in addition to the required courses previously mentioned.
 4. Students must prepare a general outline of the proposed research to include a general statement of the problem and a brief description of proposed research objectives.

Second Meeting with Ph.D. Supervisory Committee

Ph.D. students must meet with their committee during the second semester in residency. There are two main objectives for this meeting. The first is to confirm the proposed course of study and, if changes in courses occur, reasons for the change should be supplied. The second is to evaluate the research proposal. The research proposal will include:

1. a literature review;
2. a specific statement of the research problem;
3. a set of specific objectives to be accomplished, including statements of hypotheses;
4. materials and methods needed to accomplish each objective; and
5. literature cited.

If a student enters school in January and is planning to perform extensive field research that summer, an expanded research proposal is needed for the first semester committee meeting.

Annual Meetings with Ph.D. Supervisory Committee

After the first two committee meetings, Ph.D. committees will meet annually to review the student's progress. This meeting will include a written summary of the student's progress in course work and dissertation research. Any proposed changes in course work or research direction must be approved by committee action and recorded prior to the change.

Ph.D. Degree Comprehensive Examinations

The objectives of the Ph.D. comprehensive examinations are similar to those for the M.S. degree. However, in addition to being responsible for greater breadth of knowledge in the areas required of M.S. students, a Ph.D. candidate must demonstrate proficiency in a sub-discipline(s) of entomological and/or biological sciences.

The comprehensive examination consists of a written comprehensive examination or examinations followed by an oral comprehensive examination. The written exam(s) is a two-part exam consisting of a standardized exam or exams and a specialized exam. The standardized exam may take many forms depending on the candidate. It may be a

departmental exam if the candidate has not already taken the examination. Also, additional exams may be required, such as an exam in the candidate's minor field of study or the biometrics exam. The specialized exam is developed by the Supervisory Committee and may, but is not required to, include questions from Entomology faculty members and/or the candidate's committee members. The written exams are usually taken after the majority of the student's course work has been completed. The oral comprehensive examination should be taken within one month after successful completion of the written comprehensive examination. The report on the results of the comprehensive examination must be filed in the Office of Graduate Studies at least seven months prior to the final oral examination.

Ph.D. Final Oral Examination

The final oral examination for Ph.D. candidates is primarily a defense of the candidate's dissertation. The oral exam is conducted in the same manner as the M.S. oral exam.

Residency and Time Requirements

The Graduate College has established a residency requirement for the purpose of ensuring that the doctoral program is reasonably compact, continuous, coherent, and with a substantial portion completed under close supervision at the University. There are three ways the residency requirement for the Ph.D. degree may be fulfilled for a student beginning a doctoral program of the University of Nebraska: (1) The residency requirement is 27 hours of graduate work within a consecutive 18 month period or less. Fifteen of these 27 hours must be taken after receiving the Masters Degree or its equivalent. (2) For a student who transfers to the University of Nebraska with a Masters Degree from another institution, or a student that takes a break in her/his graduate work at Nebraska between the time the Masters Degree is awarded and the time he/she starts work on a doctoral program, the residency requirement is 27 hours of graduate work in a consecutive 18-month period or less. (3) The residency requirement for a member of the University staff who is engaged at least half time in instruction or research in her/his major department, or a person employed in her/his major field, the residency requirement is 24 credit hours of graduate work within a consecutive 2 year period. A further provision states that the student take at least 12 of these hours after receiving the Masters Degree or its equivalent. In all cases, not more than one-third of the work for residency (or nine hours total credits) may be taken during the summer sessions.

In exceptional circumstances, where it is clear that the purpose of residency will be fulfilled although the above formal conditions are not met, the student's Supervisory Committee may, with the approval of the Dean for Graduate Studies, designate an alternative procedure for satisfying the residency requirements.

A minimum of three full years of graduate study is normally required to complete a program for the degree of Doctor of Philosophy. However, neither the courses taken nor the time

spent in study determines whether the degree is granted. It is given primarily for high attainment in some special field of scholarship and for demonstrated ability to do independent research in a subdivision of this field. The time limit on granting the Ph.D. degree is eight years from the time of filing the student's program of studies in the Office of Graduate Studies. The student is ultimately responsible for meeting all time requirements and deadlines. [Click here for Ph.D. requirements and a general list of Ph.D. program deadlines.](#)

Foreign Language/Research Tool/Collateral Field/Minor Requirement

The Department of Entomology requires a doctoral student to take either a foreign language, a research tool, a collateral field, or a minor. Latitude is given in determining how this requirement will be fulfilled; however, the completion of this requirement should increase the student's research ability and contribute to their professional status. Proposed course work or study to complete this requirement must have prior approval from the student's Supervisory Committee.

The foreign language requirement may be met by demonstrating a reading knowledge of one foreign language. German, French, Russian, Spanish, Italian, Portuguese, Greek, Latin, the Scandinavian languages, or the Oriental languages are suggested languages. International students may use English as a second language to meet the language/research tool requirement.

A research tool should be chosen from an area not related to, but supplementing, the Entomology major or minor. Research tools approved by the Department include computer science, electron microscopy, tissue and cell culture techniques, multiple chromatography techniques, and immuno- histochemistry. Other subject areas are open for consideration but must be approved by the Supervisory Committee and the Graduate Committee. Although courses may be taken to learn a research tool, courses will not meet the research tool requirement. The student must demonstrate mastery of the research tool to her/his Supervisory Committee or to other suitable individuals designated by the Supervisory Committee.

An acceptable collateral field must include a sequence of courses totaling at least 15 semester hours in a field related to but not overlapping the student's major or minor areas. Unless otherwise specified by the Supervisory Committee, these courses: (1) must be carried in one department and completed, with a grade of C or above, and (2) cannot be counted as a part of the graduate program leading to the Ph.D. Undergraduate courses may be included as long as they were not taken to meet a previous degree requirement.

The student's Supervisory Committee has the prerogative of choosing to administer reading examinations in approved foreign languages and/or examinations to determine proficiency if

a research tool or collateral field is chosen as part of the graduate program. The Supervisory Committee may accept course credit instead of special examination as evidence of satisfactory completion of the foreign language or collateral field requirement.

DOCTORAL DEGREE DEADLINES

ITEM	DEPARTMENT	DEADLINE*
<u>Appointment of Supervisory Committee for the Doctoral Degree**</u>	Office of Graduate Studies 1100 Seaton Hall	Due the first semester of residency. Committee is expected to meet within three weeks following its appointment to discuss and approve a complete Program of Studies.
<u>Program of Studies for the Doctoral Degree**</u>	Office of Graduate Studies 1100 Seaton Hall	Must be submitted with a minimum of 45 hours exclusive of language and/or research tools remaining to be taken. Any deviation from the 45-hour ruling requires a written justification.
<u>Application for Admission to Candidacy**</u>	Office of Graduate Studies 1100 Seaton Hall	Due no later than seven months prior to final oral exam. Form is filed when the research tools have been completed and the comprehensive exams are passed.
<u>Application for Degree**</u>	<u>Graduation Services</u> 107 Admin. Bldg.	Due approximately three months prior to graduation. If not filed, a diploma will not be ordered and graduation will be delayed.

<p>1) Preliminary copy of dissertation/abstract; 2) Application for Final Oral Exam or Waiver**; 3) Incomplete grades</p>	<p>Office of Graduate Studies 1100 Seaton Hall</p>	<p>Due three weeks prior to the date of oral exam. Application from must have signatures of the Reading Committee and time and date of oral exam recorded. All incomplete grades listed on the program of studies must be removed with satisfactory grades to satisfy degree requirements.</p>
<p>Oral Examination</p>		<p>Last day to hold exam is approximately two weeks prior to graduation.</p>
<p>Deposit Dissertation***</p>	<p>1) Office of Graduate Studies 2) 106 Love Library 3) Dept. of Entomology</p>	<p>Due approximately one week prior to graduation. Include Title Sheet Pages, Report on Doctoral Degree, and Doctoral Dissertation Agreement form.</p>
<p>Dissertation (999) Grades (includes previous "incompletes" and "no reports")</p>	<p>Records Office 107 Admin. Bldg.</p>	<p>Due approximately one week prior to graduation. Submitted by the Chair of the Supervisory Committee.</p>
<p>Final Fees</p>	<p>Cashier Window 110 Admin. Bldg.</p>	<p>Due approximately one week prior to graduation. Includes binding, abstracts, and copyright (optional).</p>
<p>Final Forms</p>	<p>Office of Graduate Studies 1100 Seaton Hall</p>	<p>Due approximately one week prior to graduation. Forms include Report on Doctoral Degree and Survey of Earned Doctorates.</p>

* For exact dates, refer to a current copy of [Doctoral Degree Deadline Dates](#) distributed by the Office of Graduate Studies.

** Form is also available in the Entomology Main Office.

*** Dissertations can be engraved and bound at the East Campus Union Copy Center.

CHECKLIST FOR GRADUATE STUDY IN ENTOMOLOGY PH.D. DEGREE

FIRST SEMESTER IN RESIDENCY

1. **Form Advisory Committee** (the Graduate Committee Chair recommends a committee to the Graduate College)

The advisory committee must consist of at least 4 members, all of whom are Graduate Faculty Fellows, and one must be from outside the department

2. Submit [Appointment of Supervisory Committee for the Doctoral Degree form](#) to Graduate College

3. **Hold First Committee Meeting**

Prepare a list of masters degree, and any pertinent undergraduate courses for supervisory committee

4. Identify courses to be taken to remove deficiencies (if any). These courses will not count toward the Ph.D. program

5. Prepare [Program of Study](#):

At least 90 total credit hours (beyond the B.A. or B.S.)

At least 30 credit hours apply from the masters degree. Up to 15 additional credits from the masters degree can apply toward the Ph.D. (at the discretion of the supervisory committee)

6-8 credit hours for masters thesis research can be applied toward the Ph.D.

At least 45 hours and half of all total hours must be completed after the program of study is approved (courses being taken in the semester the program of study is filed with the Office of Graduate Studies count as after the filing)

At least half of all total hours must be in entomology (hours from the masters degree and dissertation can count toward this total)

Between 12-55 hours of dissertation research

Must take or have taken Entomology 800 (Biology and Classification)

Must take or have taken a minimum of 2 of:

Entomology 801

Insect Physiology

Entomology 804

Insect Morphology

Entomology 806

Insect Ecology

Must take 3 credits of seminar (typically Entomology 905) (Seminar must include a formal [ca. 30 minutes] presentation; 1 credit seminar from the masters degree can count toward this requirement)

Language/Research Tool/Collateral Field/Minor. All Ph.D. students must qualify in one of these areas, which is regarded as an addition to the regular course of study. Consequently, credit hours to meet this requirement (except for minors) will not count toward the total needed for the Ph.D. degree
 Language - a demonstrated reading knowledge of a foreign language or sufficient knowledge to converse in the language and translate both directions.
 Research Tool - demonstrated mastery of a special technique approved by the supervisory committee.

Collateral Field - 15 credit hours in a field related to, but not overlapping, the major. Credits may not apply toward 90 hours required for a Ph.D.

Minor - the department accepts a formal minor to meet this requirement (credits for a minor do count toward the Ph.D.). The minor must include 16 credit hours with 6 credit hours in courses open exclusively to graduate students (900- or 800-level courses without 400 counterparts), and credits from the masters degree may not apply toward the minor.

At least half of the total credit hours must be completed at the University of Nebraska

Residency requirement. For a student with a masters degree from another institution or for a student who has had a break in graduate work at the University of Nebraska between the masters and Ph.D., 27 graduate credit hours must be completed in a consecutive 18-month period or less, with no more than 9 credit hours toward this total from credits during a summer session

6. Indicate to the advisory committee the general area of research and provide a brief description of the proposed research objectives. A brief description of the research topic or field is required on the Program of Study
7. Designate a dissertation reading committee (two supervisory committee members other than the Chair). The reading committee will evaluate the dissertation before it is circulated to the entire supervisory committee
8. **After meeting**, the Program of Study must be signed by:
 - Major Professor(s)
 - Member of Graduate Committee from Minor Department (if applicable)
 - Dean of Graduate Studies

After a copy of the approved Program of Study is returned from the Graduate College (to the major advisor), a signed copy also should be placed in the student's graduate file in the main office.

SECOND SEMESTER OF RESIDENCY

1. Hold Second Committee Meeting

Prepare formal research proposal for presentation to committee. It should include:

Review of pertinent literature - although the literature review will need to be expanded as research progresses, a thorough basic knowledge is necessary to develop sound objectives and a strong plan of attack. The review should be sufficiently complete at this point to guarantee that the committee is comfortable with the student's knowledge of the research area.

Statement of research question - what is needed and what new knowledge will be contributed?

Research objectives - define the specific research objectives to address the research question.

Procedures - for each objective, describe the specific experimental procedures to be followed including experimental design and analysis, schedule of activities

2. A revised research proposal (revised in response to committee suggestions) should be placed in student's folder

ANNUALLY AFTER THE FIRST YEAR

1. Hold Committee Meeting

Inform committee of progress in courses and research. Make any necessary modifications to research as needed (and to the Program of Study if absolutely necessary; changes will require approval from the Graduate College). A written summary of research findings to date is encouraged

2. The major advisor should send a memo to graduate committee chair indicating that meeting was held and whether satisfactory progress has been made to date. This will

be included in the student's file in the main office. Written summaries should be given to the committee

BEFORE GRADUATION

1. Take and Pass Comprehensive Exams

Take and pass (or have previously passed) the departmental standard entomology exam or the Entomology Certification Board exam

Take and pass the written comprehensive exam, an investigation of the student's breadth of understanding of their field of knowledge, from the supervisory committee

Upon successful completion of the written comprehensive exam, take and pass the oral comprehensive exam administered by the supervisory committee

2. [Application for Admission to Candidacy](#) (Must occur at least 7 months prior to graduation)

After passing the comprehensive examinations, the supervisory committee will report the results to the Office of Graduate Studies. Once the comprehensive exams are passed and the Language/Research Tool/Collateral Field/Minor requirement is met, the supervisory committee recommends admission to Candidacy to the Ph.D., and submits the form to the Graduate College for approval. **If the term of Candidacy extends beyond 3 years, the student must retake the comprehensive examination.** After admission to Candidacy, the student must register each academic semester until the Ph.D. is received. **Failure to register will terminate Candidacy.**

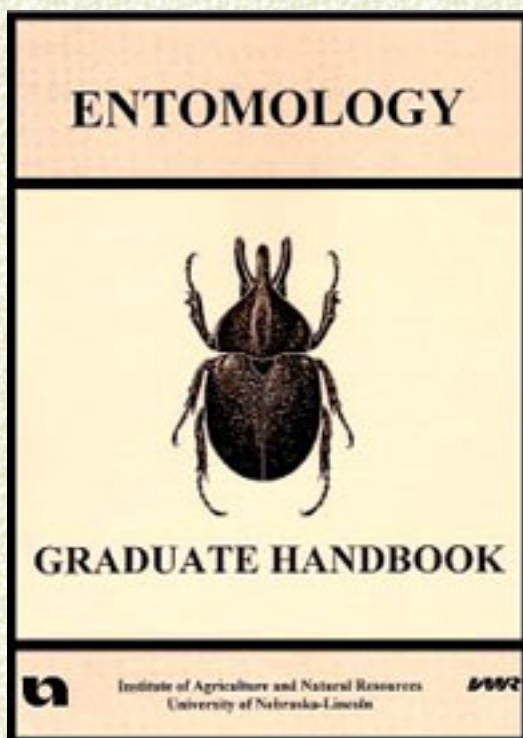
3. File [Application for Degree](#) and \$25 with [Graduation Services](#) effective for current term only.
4. **Give copy of dissertation and abstract to reading committee for approval before the dissertation is submitted to the entire supervisory committee.** Reference: [Guidebook for Preparing Thesis or Dissertation](#).
5. **Give copy of dissertation and abstract to supervisory committee** at least 3 weeks before final exam. (The dissertation and abstract are evaluated by a reading committee of two supervisory committee members, other than the chair.)
6. **Present [Application for Final Oral Examination](#) (with signatures of reading committee) and copy of dissertation and abstract to Office of Graduate Studies**

(for preliminary review) at least 3 weeks before final exam

7. **Take and pass final oral exam**
8. Give dissertation seminar to the department and defend the dissertation with the supervisory committee. The final exam may include questions in areas unrelated to the dissertation at the supervisory committee's discretion
9. Submit Report on Doctoral Degree form (provided by Graduate College) and signature pages to Graduate College. Also present 2 copies of dissertation prior to depositing with Love Library
10. Deposit 2 complete copies of dissertation, 3 copies of abstract, and signed microfilm and Doctoral Dissertation Agreement form with Dean of University Libraries (106 Love Library). Additionally, an \$18 binding fee and \$50 microfilming fee must be paid
11. **Deposit 1 complete copy of the dissertation with the department**

TIME LIMITS

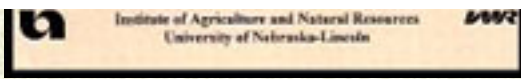
The work for the Ph.D. degree must be completed **within 8 years** from the time of filing the Program of Study.



Financial Assistance

Graduate Assistantships

The Department of Entomology offers one-half time (0.49 FTE) Graduate Research Assistantships (GRA) or Graduate Teaching Assistantships (GTA) to both M.S. and Ph.D. students. These [assistantships](#) may be funded from state or federal appropriations or from grants received from state, federal, or private granting agencies. Although the monthly stipends for M.S. and Ph.D. assistantships are slightly different, all M.S.



and Ph.D. assistantships offered by the Department of Entomology will be at the same monthly rate, respectively. However, students who apply for assistantships from external units or agencies may receive the monthly stipends approved by that unit or agency. Assistantships that are included in a grant provided to a faculty member will be considered as a Department of Entomology assistantship and must be at the departmental rate. GRA's are expected to be involved up to 20 hours per week with non-thesis related projects supervised by their major advisors.

GRA's at District Centers carry out their research under the direction of an advisor at the District Center and complete formal course work during the academic year in Lincoln under the direction of a co-advisor.

Occasionally, a student may have particular training needs which must be obtained through a cooperative program with another department. In this case, an assistantship may be arranged, with the approval of the advisors and department chairpersons involved, for funding through both departments. Although GRA or GTA appointments are usually not made for more than one-half time, arrangements can be made for less than half time, if agreed upon by the faculty advisor, Department Head, and the student at the time of the offer.

Because assistantships carry a work requirement, students appointed 0.49 FTE are limited to a maximum of 10 credit hours per fall or spring semester and 6 credit hours per 8-wk summer session, 4 credits per 5-wk session, and 2 credits per 3-wk session. Graduate Assistantships of 0.49 or 0.33 FTE provide tuition waiver. Graduate Assistants appointed more than 0.33 FTE for two consecutive semesters in a given academic year may be eligible for up to 12 hours of tuition waiver during the summer sessions if they are not on appointment. Student eligibility should be clarified with the Graduate Office. Graduate Assistants on tuition waiver are required to pay student and program fees. Graduate students on tuition waiver that withdraw from the graduate program or resign their RA/TA during a semester, are required (by the University) to pay all or a portion of the tuition costs for that semester. Students on assistantships must be enrolled for at least 1 credit hour every semester they are on assistantship (excluding the 3-wk summer session).

Scholarships and Fellowships

Scholarships and fellowships are available to both M.S. and Ph.D. students. Any student interested in applying for unrestricted scholarships or fellowships should request information from the Graduate College. Information regarding restricted fellowships and scholarships (i. e., restricted to the Department of Entomology or a specific area) may be obtained from the Department. Scholarships and fellowships may be offered in addition to other financial assistance. The student should be aware of all stipulations on any fellowship or scholarship for which he/she is applying, and should consult the [UN-L Graduate Studies Bulletin](#): General Information Section, "Financial Aid" and "Employment and Registration".

Hourly

A student may be employed on an hourly basis on a project in the area of his/her study. Pay is based on amount of experience and academic level (B.S., M.S., Ph.D.). A student being paid on an hourly basis is not eligible to receive GRA or GTA benefits.

Other Assistance

Information regarding other types of financial assistance such as loans may be obtained from the [Office of Scholarships and Financial Aid](#).

Myron H. Swenk Memorial Fund

The Myron H. Swenk Memorial Fund is a scholarship grant-in-aid program designed to provide additional financial assistance to students. Funds are primarily used by students for traveling to professional meetings. The fund was established in 1970 in honor of Myron H. Swenk, Entomology Department Head from 1919-1941, by his sister, Iva B. Swenk, as part of her estate. The Nebraska Foundation manages the fund by investing the principal in appropriate financial instruments. Interest accumulated on these investments is available to students. The Executive Committee of the Bruner Entomology Club under the guidance of the Club's faculty advisors and the Department Head, review requests for scholarship grant-in-aid and authorize the allocation of funds. Application forms are available from members of the Bruner Club Executive Committee.

GRADUATE STUDENT REGISTRATION REQUIREMENTS

Fellowships (Widaman Trust, etc.) - Fellowship recipients are required to be "full-time" students (at least 9 hours per spring and fall semester) during the term of their appointment. Most fellowships are academic year appointments and enrollment requirements do not normally apply to summer sessions.

Graduate Research Assistantships - Entomology RA's are on 0.49 FTE appointments which require approximately 20 hours of service per week. The service may include working for your Major Advisor, the Department, etc. Service is in addition to normal student activities (classes, thesis/dissertation research). Minimum and maximum enrollment requirements are listed below.

Graduate Teaching Assistantships - Entomology TA's are on 0.33 FTE appointments which require approximately 13 hours of service (teaching) per week. TA appointments are for the academic year. Our TA's are usually appointed to research assistantships during the summer. See below for minimum and maximum enrollment requirements.

<u>Semester</u>	<u>Hours</u>			
	Research Assistant		Teaching Assistant	
	<u>Minimum</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Maximum</u>
Fall	1	10	1	12
Spring	1	10	1	12
Summer*				
1st 5 wk (8wk)	1	4 (6)		
2nd 5 wk	1	4		

*Must enroll for at least one hour in each five wk summer session (or in the eight wk and 2nd five wk summer session) to be eligible for an assistantship during the summer. Pre-session enrollment will not substitute for the 5 wk or 8 wk terms.

Full-Time Student Certification - Students that need the [Graduate College](#) to certify full-time status must enroll for at least 9 credit hours during each academic year semester, and for at least 3 hours during one summer session. Full-time student certification is sometimes needed by international students for visa purposes, to qualify for veteran or other federal loans, and for various fellowships.

[University Health Services](#) - If you take at least 7 hours during academic semesters, or at least 4 hours during each 5 or 8 week summer session, health center services are included with your student fees payment. If you take fewer hours, your fees are reduced approximately 50 percent and health services are not included. However, if you need University Health Center services during the semester, you can pay the fees when you go to the health center. Therefore, there is no need to take additional hours just to qualify for Health Center services. If you use the health center, your cost will be the same regardless of the number of hours you take.

Nebraska EntWeb

University of Nebraska-
Lincoln

Graduate
Assistantships
2006-2007
Academic
Year



1. A graduate assistantship is 0.49 FTE for a Graduate Research Assistant and 0.33 FTE for a Graduate Teaching Assistant. It is possible to make an appointment for less FTE with an appropriate adjustment in the stipend.
2. Appointments of 0.33 FTE (or greater) carry a waiver of out-of-state tuition.
3. Appointments of 0.33 FTE (or greater) carry a tuition remission of 12 hours per semester.
4. In general, a Research Assistant's appointment stipulates one-half of the time may be devoted to thesis/dissertation research and up to one-half of the time may be spent assisting in the major professor or project research.
5. The departmental stipend scale will be used for all assistantships processed through the department. However, students who apply for assistantships from external units or agencies may receive the monthly stipend approved by that unit or agency. Assistantships that are included in a grant provided to a faculty member will be considered as a Department of Entomology assistantship and must be at the departmental rate.
6. For the period of August 1, 2006, through July 31, 2007, we have proposed the following stipends for the Department of Entomology.

Assistantship	FTE	Annually	Monthly
Graduate Research Assistant	0.49		
M.S.		\$17,868 (12 months)	\$1,489
Ph.D.		\$18,804 (12 months)	\$1,567

7. For details on the number of credit hours permitted while on assistantships, refer to the current [Graduate Studies Bulletin](#).

Hours Employed Per Week	Academic Year	8-Week Session	5-Week Session
13 (e.g., 0.33 FTE)	12	8	5
17-20 (e.g., 0.49 FTE)	10	6	4

[Nebraska EntWeb](#) > [Graduate Studies Program](#) > [Graduate Handbook](#) >