The Department of Integrative Biology offers graduate work leading to the master of arts or the master of science and the doctor of philosophy in zoology. Facilities and staff are available for advanced study in a wide variety of zoological fields including aquatic and terrestrial ecology, conservation biology, cell/molecular/developmental and neurobiology, endocrinology, ethology, genetics, evolution and systematics, comparative physiology, and physiological ecology.

In addition to a broad range of well-equipped laboratories, research facilities include advanced microscopy facilities (http://www.microscopy.wisc.edu), limnological laboratories on campus (Lake Mendota) and in northern Wisconsin (Trout Lake), the University Arboretum, the Zoological Museum and a Molecular Systematics Laboratory.

**FUNDING**

Financial support may be provided through a limited number of teaching and research assistantships and by federal, industrial, and privately sponsored fellowships and traineeships. Graduate student support is available to all accepted graduate students and will be determined before arrival on campus.

**REQUIREMENTS**

**MINIMUM DEGREE REQUIREMENTS AND SATISFACTORY PROGRESS**

To make progress toward a graduate degree, students must meet the Graduate School Minimum Degree Requirements and Satisfactory Progress (http://guide.wisc.edu/graduate/#policiesandrequirementstext) in addition to the requirements of the program.

**MASTER’S DEGREES**

M.A., M.S.

**MINIMUM GRADUATE DEGREE CREDIT REQUIREMENT**

30 credits

**MINIMUM GRADUATE RESIDENCE CREDIT REQUIREMENT**

16 credits

**MINIMUM GRADUATE COURSEWORK (50%) REQUIREMENT**

16 credits

At least 50% of credits applied toward the graduate degree credit requirement must be in graduate-level coursework; courses with the Graduate Level Coursework attribute are identified and searchable in the university's Course Guide (http://my.wisc.edu/CourseGuideRedirect/BrowseByTitle).

**PRIOR COURSEWORK REQUIREMENTS: GRADUATE WORK FROM OTHER INSTITUTIONS:**

With committee approval, students are allowed to count no more than 14 credits of graduate coursework from other institutions. coursework earned five or more years prior to admission to a master's degree or earned ten years or more prior to admission to a doctoral degree is not allowed to satisfy requirements. Typically committees will choose to cap coursework from another institution at a lower level than 14 credits, but this is a committee decision to be made on a case-by-case basis.

**PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNDERGRADUATE**

With committee approval, students are allowed up to 7 credits numbered 300 or above from their UW–Madison undergraduate career to fulfill graduate requirements. Typically committees will choose to cap coursework allowed from undergraduate careers at a lower level than the 7 allowed, but this is a committee decision to be made on a case-by-case basis.

**PRIOR COURSEWORK REQUIREMENTS: UW–MADISON UNIVERSITY SPECIAL**

With committee approval, students are allowed to count no more than 15 credits of coursework numbered 300 or above taken as a UW–Madison Special student. Coursework earned five or more years prior to admission to a master's degree or earned ten years or more prior to admission to a doctoral degree is not allowed to satisfy requirements. Typically committee members will choose to cap the number of coursework taken as a University Special student at a lower level, but this is a committee decision to be made on a case-by-case basis.

**CREDITS PER TERM ALLOWED**

15 credits

**PROGRAM-SPECIFIC COURSES REQUIRED**

Required coursework is determined for each student individually by the student’s advisory committee.

**OVERALL GRADUATE GPA REQUIREMENT**

3.00

**OTHER GRADE REQUIREMENTS**

An average record of B or better in all work taken as a Graduate Student is required by the Department of Zoology (grades of P and S are for this purpose considered to be satisfactory at the B level; grades of Incomplete are considered for this purpose to be unsatisfactory if they are not removed during the following semester of residence).

**PROBATION POLICY**

The Graduate School regularly reviews the record of any student who earned grades of BC, C, D, F, or Incomplete in a graduate course (300 or above), or grade of U in research credits. This review could result in academic probation with a hold on future enrollment or in being suspended from the Graduate School.

At the department level, the chair, in consultation with the major professor and advisory committee, may determine that the student’s progress is unsatisfactory and so report to the faculty in closed session. If, after faculty review, the chair’s determination is considered justified, the student will be notified that tenure in the department is to be terminated at the end of the semester. If the student disagrees with the
judgment of the faculty, it shall be the student's responsibility to show
cause as to why the faculty's opinion is not justified. Any student who
is judged wanting in sufficient progress will be granted one additional
probationary semester, at the end of which continuation in Graduate
School will be denied unless by extraordinary initiative and application
the student is able to persuade the faculty to reverse their decision.

ADVISOR / COMMITTEE
Every graduate student is required to have an advisor and a committee.
To ensure that students are making satisfactory progress toward a
degree, every student is required to meet with the advisor and committee
annually to review progress. If a progress report has not been filed by May
1, a hold will be placed on student course registration.

ASSESSMENTS AND EXAMINATIONS
In the second semester of the first year, students must complete the
Certification of Candidate for a Master's Degree.

Typically the defense of the master's degree occurs no later than the
end of the student's sixth semester. A master's degree warrant must be
requested from the department prior to the defense.

TIME CONSTRAINTS
It is up to the student's committee to determine whether or not a student
who has been absent for five or more consecutive years will lose the
credits earned before the absence; that coursework may not count
toward Graduate School credit requirements.

LANGUAGE REQUIREMENTS
To be determined by the advisory committee.

ADMISSIONS
The department will accept applicants who have an adequate background
for advanced work in one or more of the subdisciplines listed above and
for whom a faculty member is willing to serve as major professor. In
addition to the Graduate School application, all applicants must submit
GRE scores, at least 3 letters of recommendation, a personal statement
including areas of research interest and the names of prospective faculty
advisors, a CV/resume, official transcripts from all undergraduate and
graduate schools attended, and a calculation of the undergraduate GPA
for the last 60 hours of undergraduate work. See the admissions page on
the zoology website for more specific instructions regarding application
requirements. The annual admission application deadline is December
1st.

The department faculty strongly believes that graduate education
should be distinguished from undergraduate education in recognition of
individuality and emphasis on responsibility in graduate students. This
philosophy requires flexibility and is not well served by the imposition
of many formal requirements to be met by all students. Rather, more
emphasis is placed on the role of advisory committees in devising
programs of breadth and depth appropriate for individual students
with due regard to areas outside of biology which are important for the
student's effectiveness in the chosen field.

LEARNING OUTCOMES

KNOWLEDGE AND SKILLS

KNOWLEDGE
• Master fundamental skills in at least one of the broad subject areas
  represented in the Department of Zoology.
• Students will demonstrate understanding of major current and past
  theories, research findings, and methodologies and techniques in
  their area of concentration.
• Students will develop critical thinking skills. They will retrieve and
  examine scientific literature, evaluate evidence for and against
  hypotheses, identify knowledge gaps, strengths and weaknesses in
  existing literature, synthesize knowledge, and develop conclusions.

RESEARCH
• Students will complete an original research project in one of the
  broad subject areas represented in the Department of Zoology.
• Students will retrieve, evaluate, and interpret professional scientific
  literature and use this information to select and/or use the most
  appropriate methods for their own research project.
• Students will conduct research, analyze, and interpret resulting data.
  Students will prepare a thesis or research report describing their
  research project.

COMMUNICATION
• Effectively communicate in writing and orally.
• Students will write a clear and concise research report.
• Students will present research articulately and informatively.
  Students will have opportunities to engage in public outreach and
  education.

PROFESSIONAL CONDUCT

ETHICAL CONDUCT
• Students will have an understanding of professional and ethical
  responsibility.
• Students will be trained to use scientific rigor when designing
  experiments, collecting and analyzing data, interpreting and reporting
  results.
• Students will be trained in the ethics of publishing.
• Students will know and adhere to laws, regulations, needed permits
  and licenses, occupational health and safety standards.

CAREER PREPARATION
• Students will be provided with diverse training that will prepare
  them for a range of flexible and sustainable careers (e.g., academia,
  industry, government, science policy and administration, science
  commerce, science writing, law, and science education and outreach
  at all levels).
• Students will develop broadly applicable skills in critical thinking and
  problem solving.
• Students will have opportunities for teamwork, communication skills,
  and collaborations.
Faculty: Professors: Hardin (chair), Bement, Blair, Carpenter, Engels, Epstein, Fernandez, Gammie, Goldberg, Halloran, Ives, Karasov, Lee, Lindroth, Marler, Porter, Ritters, Stanley, Stretton, Stier, Turner, Vander Zanden; Associate Professors: Amann, Auger, Bleviweiss, Brunet, Currie, Damschen, Gratton, Grinblat, Hawks, Lee, Orrock; Assistant Professors: Coen, McIntyre, Payseur, Peery, Pool, Sharma, Wolman