

ANIMAL BEHAVIOR GRADUATE GROUP (ABGG)

DEGREE REQUIREMENTS FOR THE PH.D.

REVISIONS: JUNE 6, 2007 AND FEBRUARY 8, 2008

Approved by Graduate Council On Feb 20, 2008

1. Admissions Requirements

Applicants for admission to ABGG must meet the University of California minimum GPA requirement for admission. In addition, candidates must complete the following entrance requirements:

- A Bachelor's or Master's degree in a discipline relevant to the biology of behavior.
- The equivalent of at least one course from each of the following subject areas:
 - Ecology (e.g. Ecology and Evolution 101, Environmental Studies 100)
 - Genetics (e.g. Biological Sciences 101)
 - Statistics (e.g. Psychology 103, Statistics 102)
 - Evolution (e.g. Evolution and Ecology 100)
 - Animal behavior (e.g. Neurobiology, Physiology and Behavior 102)
 - Physiology (e.g. Neurobiology, Physiology and Behavior 100).

If the subject area courses have not been completed prior to admission, then they must be completed by the end of the first year in the program either by (1) taking courses as approved by the Graduate Advisor, or (2) by being a Teaching Assistant in the courses listed above or their equivalents, and by attending the course lectures.

Other requirements for admission include:

- Graduate Record Examination (General Test)
- English proficiency examination for international applicants who have not studied at an English speaking University: TOEFL or other University approved examination. International applicants must meet the Office of Graduate Studies minimum TOEFL score requirement (or equivalent for other University-approved examination).
- Three letters of recommendation
- Statement of Purpose
- A Confirmed Major Professor: Prior to admission, an ABGG faculty member in good standing must confirm that he/she is willing to act as the student's faculty mentor.

Students are also encouraged to submit a curriculum vita or resume with their application documents.

2. Dissertation Plan

The ABGG follows Dissertation Plan C (http://www.mrak.ucdavis.edu/senate/ddregulations_0405_revisions.pdf). The dissertation committee consists of at least three members, who guide the candidate in his or her dissertation research. The committee arranges for meetings with the candidate as deemed necessary to complete the dissertation. The committee conducts a final oral examination, which focuses primarily on questions arising out of the relationship of the dissertation to the general field of study of the dissertation.

3. Course Requirements

Once enrolled, all students must take certain core courses and at least two elective courses. The aim of the core curriculum is to introduce students to the breadth of approaches to animal behavior, and to encourage the interdisciplinary thinking that distinguishes our program. These courses are required of all students in the program:

Core Required Units

Scientific Approaches to Animal Behavior (ANB 201)	3 units
Fundamentals of Animal Behavior (ANB/PSC 209A and 209B)	10 units
Advanced statistical analysis (e.g. PSC 204A; PSC 204B, C or D; STA 205, 106, 108, 138; AGR 204, 206)	4 units
Seminar in Animal Behavior (ANB 290)	3 units
Total Core Units	20 units

Elective Graduate Units

Students must also take two elective courses (of at least 3 units each) in their area of interest, chosen in consultation with and approved by their Course Guidance Committee. The graduate advisors can provide lists of recommended courses focusing on the behavior and conservation of wild animals, animal management and welfare, ethology and evolutionary bases of animal behavior, and physiological bases of animal behavior.

Total Minimum Unit Requirement	26 units
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At least 16 of the total minimum number of 26 units completed for the degree must be taken in graded courses offered at the 200 course level. (Courses in the 300 and 400 series may be accepted if they have been approved for graduate credit.)

Recommended Courses and Experience

The following courses are not required, but are strongly recommended:

A course in teaching science (e.g. BIS 310, PSC 390A, B)

At least one additional course in statistics or modeling (e.g. PBG 231, PSC 120)

Students are also strongly urged to obtain at least 30 contact hours of teaching in courses directly related to the subject of animal behavior. This may include assisting with laboratory or field study courses as well as giving lectures to undergraduates.

4. Special Requirements

None

5. Committees

a. Admissions Committee

The Admissions Committee is composed of three to four ABGG faculty members (volunteers appointed by the Chair of the ABGG) and one graduate student (elected by the ABGG graduate students). Shortly after the deadline for applications, files are reviewed and ranked by the Admissions Committee. Based on academic accomplishment and potential, this committee determines which of the applicants can be admitted into the group. Simultaneously, faculty members examine the files to identify students whom they are willing to sponsor. No student can be admitted to the group unless at least one faculty member in good standing indicates that they are willing to act as that student's major professor.

b. Course Guidance Committee

Students should establish their Course Guidance Committee shortly after entering the program. This committee is composed of a faculty advisor and a student advisor, who are assigned to the student by the ABGG Graduate Advising Committee, and the student's major professor. A third faculty member may also be added to the committee, at the discretion of the student and the major professor. The Course Guidance Committee is responsible for helping students develop their study plan, and must approve any coursework taken to fulfill the admissions requirements as well as the electives taken to fulfill the course degree requirements. Graduate students must register for a minimum 12 units per quarter to maintain full-time status.

c. Preliminary Examination Committee

The Preliminary Examination is given at the end of the third quarter of the first year of study. It consists of a three-hour written exam, followed a few days later by a 30 to 45-minute oral exam designed to address weak areas in the written portion. The exam is based on material drawn from the three-quarter core course sequence in animal

behavior (ANB 201 and ANB 209A/B), plus additional reading material provided by the Preliminary Examination Committee. The Preliminary Examination Committee is composed of three ABGG faculty members who are appointed by the Chair of the Graduate Group.

The goal of the Preliminary Examination is to ensure that all students have a broad, general background in animal behavior and are able to synthesize information from different sources. It is not designed to weed students out, but instead to uncover any areas of weakness that exist, and to identify the best means for the student to remedy those weaknesses. Such remedies may (or may not) include a requirement that one or both parts of the examination be repeated. Unsatisfactory performance on both the written and oral parts of the exam for TWO attempts qualifies as a failure. A written evaluation of the student's performance on this examination will be provided by the Preliminary Examination Committee to the student, his/her major professor, and the student's future Qualifying Examination Committee. Satisfactory performance on this exam will satisfy the Graduate Council requirement for a breadth examination for the purpose of advancing to candidacy for the Ph.D.

d. Qualifying Examination Committee

Before advancing to candidacy for a doctoral degree, a student must have satisfied all requirements set by the Animal Behavior graduate program, must have maintained a minimum GPA of 3.0 in all course work undertaken (except those courses graded S or U), and must have passed a Qualifying Examination before a committee appointed to administer that examination. The Qualifying Examination is an oral examination approximately 2-3 hours in length that focuses on the student's proposed research, mastery of the student's area of specialization, statistical analysis, and research methods. Passing the QE exam makes the student eligible for advancement to Ph.D. Candidacy. The student must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee in order to be officially promoted to Ph.D. Candidacy. Refer to the Graduate Council website for additional details regarding the Doctoral Qualifying Examination at http://graduatestudies.ucdavis.edu/gradcouncil/Doctoral%20_Qualifying_Examinations.

According to university policy, graduate students cannot hold an academic title (e.g., Teaching Assistant, Research Assistant) for more than 9 quarters before passing their Qualifying examination. To make satisfactory academic progress and to meet this requirement, students are strongly encouraged to take this exam by the beginning of their third year.

Five faculty members serve on the Qualifying Examination committee. The student selects faculty who are interested in the same type of research, who are knowledgeable in specific areas of interest, and with whom they have had interactions. Students should contact prospective committee members early (e.g. at least 4 months prior to the target examination date), and determine which faculty member will serve as chair. The student's major professor cannot serve on the Qualifying Examination committee. See

the UC Davis Graduate Council Policy for Doctoral Qualifying Examinations (link shown above) for more details concerning allowable QE committee membership.

All ABGG students are required to have statistics and research methods covered in their exam. In addition the student must select three to four additional subject areas within their area of specialization. Examples of past subject areas chosen by students include: evolution, ecology, physiological ecology, reproductive physiology, conservation biology, ornithology, primatology, mammalogy, fish biology, social behavior, behavioral endocrinology, neuroethology, behavioral ecology, development, animal welfare. The student should send the list of the proposed QE members, along with the topic area(s) each will address, to the Graduate Advising Committee for review. The Graduate Advising Committee then forwards the QE member names to the Dean of Graduate Studies, who formally appoints the committee.

Students should meet with each of their committee members several times prior to the examination to discuss the research proposal and appropriate readings and potential question areas. Students are expected to provide each committee member with a written copy of the research proposal at least three weeks in advance of the examination. If students so choose, they may give a 15-minute informal presentation of their proposal at the beginning of their exam.

e. Dissertation Committee

After passing the Qualifying Examination students must suggest members to serve on their Dissertation Committee. This committee consists of at least three individuals, one of whom is the student's major professor. Membership nominations must be submitted to Graduate Studies for formal approval (see UC Davis Graduate Council Policy for Service on Advanced Degree Committees for more details concerning allowable dissertation committee membership). When the Dissertation Committee determines that the dissertation is acceptable for examination, students must give an open exit seminar, which is followed by an oral defense of the dissertation. Admission to the oral defense is restricted to the members of the Dissertation Committee, all of whom must be present during the examination, either in person or via a video or audio link.

6. Advising Structure and Mentoring

The ABGG has three graduate advisors, who are nominated by the ABGG Chair and appointed by the Dean of Graduate Studies, who serve staggered three-year terms. The individual the third year of his or her term serves as the Master Advisor. There are also three student advisors, appointed by the Master Advisor. Together these individuals comprise the Graduate Advising Committee.

Upon entering the program, each new graduate student is assigned one of the three faculty advisors and one of the three student advisors. The role of the Graduate Advising Committee is to serve as members of each student's Course Guidance Committee, and also to review admissions requirements, advising policy, and curricular requirements, and to assist the Chair and the Executive Committee in implementing the

graduate program in the ABGG.

The role of the major professor is to provide his or her students with guidance with respect to degree requirements, dissertation research, and professional development. The faculty members participating in the ABGG have agreed to adhere to the campus guidelines for mentoring of graduate students. Graduate students in the program are encouraged to review these guidelines, which may be found at <http://gradstudies.ucdavis.edu/gradcouncil/mentoring.pdf>. Graduate students who are experiencing any difficulties communicating or interacting with their major professor are encouraged to seek advice of the Chair or Graduate Advisors as soon as these problems first arise.

7. Advancement to Candidacy: The student is eligible for advancement to Candidacy after successful completion of all Animal Behavior graduate program degree requirements, including the Preliminary Exam, and after passing the Qualifying Examination. See “Section 5d” above and the Graduate Council Policy on Doctoral Qualifying Examinations for further details: http://graduatestudies.ucdavis.edu/gradcouncil/Doctoral%20_Qualifying_Examinations.

8. Normative time to Degree: 5 years

9. Typical Time Line

Year 1: Remedy admissions deficiencies, if any. Take ANB 201, ANB 209A, and ANB 209B. Take Preliminary Examination at the end of the Spring quarter.

Year 2: Complete remaining core and elective requirements. Send names of proposed Qualifying Examination committee members to Master Advisor for approval by Advising Committee. Take Qualifying Examination by the end of the 2nd year, unless the Preliminary Examination needs to be re-taken during the Spring quarter of the second year.

Year 3: Take Qualifying Examination during the beginning of the 3rd year, if not completed during the second year. Submit proposed Dissertation Committee to Graduate Studies for approval.

Year 5: Complete dissertation, give exit seminar, and defend thesis.

10. PELP and Filing Fee status

Information about PELP and Filing Fee status can be found in the Graduate Student Handbook: <http://www.gradstudies.ucdavis.edu/students/handbook/1.html>

11. Dissertation requirements:

Students must give an open exit seminar, which is followed by an oral defense of the dissertation.

12. Other information:

The Animal Behavior Graduate Group is a Ph.D. degree-granting group. However, under special circumstances ABGG students may be awarded a Master's degree if:

- ✓ They pass their Preliminary Examination
- ✓ They meet the university requirements for a Plan II Master's: completion of 36 units of course work, at least 18 of which must be at the graduate level (200 series) in the major subject area, with no more than 9 research units (299) being used to satisfy the 18-unit graduate course requirement
- ✓ The Executive Committee votes to recommend the granting of the degree to the Office of Graduate Studies. Students should petition the committee, stating their reasons for wanting to be awarded the M.S. degree.