

June 20, 2011

TRISH BERGER, Chair
Animal Biology Graduate Group

RE: Animal Biology Graduate Group revised degree requirements

Dear Colleague:

At its meeting of June 3, 2011, Graduate Council considered and approved the revisions to the degree requirements for the Animal Biology graduate program. Thank you for your work on the revisions to the document.

Enclosed is a copy of the new degree requirements with the Graduate Council approval date; please keep a copy for your files and for future revisions. The Office of Graduate Studies will also will keep a copy in its files and has posted them to your program pages at:
http://www.gradstudies.ucdavis.edu/programs/program_detail.cfm?id=8.

Thank you for your efforts on behalf of graduate education.

Sincerely,



André Knoesen, Chair
Graduate Council

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Enclosure

c:
Director Jurado
Graduate Program Staff Nork

**ANIMAL BIOLOGY GRADUATE GROUP
Ph.D. AND MS DEGREE REQUIREMENTS
Revised: 2005
Graduate Council Approval: June 3, 2011**

Master's Degree Requirements

1) **Admissions requirements:** Consideration for program admission requires a bachelor's degree, three letters of recommendation, official transcripts, GRE scores, TOEFL or IELTS score (if applicable) and Office of Graduate Studies online application with fee by the stated admission deadline. A minimum GPA of 3.0 is required. No student is admitted without an identified major professor. Meeting all of the admission criteria does not guarantee admission, only eligibility for admission. The decision to recommend admission to the Dean of Graduate Studies will be made by the Animal Biology Graduate Committee after evaluation of the complete application and includes competitiveness of applicants.

a) **Prerequisites:** In addition to the admission requirements stated above, applicants are expected to have the equivalent of the following UC Davis courses:

NPB 101	Systemic Physiology	5 units
ANG 107	Genetics & Animal Breeding	5 units
NPB 121	Physiology of Reproduction	4 units
ANS 124	Lactation (except aquaculture students)	4 units
ANS 123	Animal Growth & Development	4 units
ABI 102/103	Biochemistry & Metabolism	10 units
CHE 8A/B	Organic Chemistry	6 units
STA100	Applied Statistics	4 units
Integrated Animal Biology course such as		
ANS 146 or	Dairy Production	4 units
ANS 119 or	Invertebrate Aquaculture	4 units
WFCB 111	Biology and Conservation of Wild Animals	3 units

b) **Deficiencies:** Students are not usually admitted with more than two coursework deficiencies and must be made up by the end of the first academic year following initial enrollment. Courses cannot be taken S/U unless the courses are approved as exceptions by Graduate Council (<http://www.gradstudies.ucdavis.edu/gradcouncil/su.pdf>).

2) **M.S. Plan I or II**

Plan I. This plan requires a thesis and 30 units of graduate and upper division courses (100 and 200 series). A minimum of 6 units of ABG 299 (research) supervised by major professor and a maximum of 12 units of 299 research units count toward these 30 required units. At least 6 of the 30 units must be graded graduate level courses (A, B, C).

Plan II. This plan requires 36 units of graduate and upper division courses (100 and 200 series). 27 of the 36 required units are to be graded units (A, B, C) and 18 of these 27 will be graded graduate level units (200 and above). A minimum of six research units (ABG 299 and maximum of 7 units) are required. A comprehensive final examination in the major subject is required of each candidate. No thesis is required.

3) **Course Requirements - Core and Electives (Plan I: 30 units; Plan II 36 units)**

a) **Core Courses (Plan I & Plan II: 8 units)**

ABG 290 Animal Biology Seminar 2 units

ABG 299 Animal Biology Research 6 units

b) **Elective Courses (Plan I: 22 units; Plan II: 28 units)**

Courses chosen to meet individual student needs, compatible with requirements and with the approval of the graduate adviser.

- c) **Summary: Plan I.** This plan requires a thesis and 30 units of graduate and upper division courses (100 and 200 series). A minimum of 6 units of ABG 299 (research) supervised by major professor and a maximum of 12 units of 299 research units count toward these 30 required units. At least 6 of the 30 units must be graded graduate level courses (A, B, C). Electives are chosen with the approval of the graduate adviser. Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Once course requirements are completed, students can take additional classes as needed, although the 12 units per quarter are generally fulfilled with a research class (299) and perhaps seminars. Per UC regulations students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

Plan II. This plan requires 36 units of graduate and upper division courses (100 and 200 series). 27 of the 36 required units are to be graded units (A, B, C) and 18 of these 27 will be graded graduate level units (200 series). A minimum of six research units (ABG 299 and maximum of 7 units) are required within this 36 units. Electives are chosen with the approval of the graduate adviser. In addition, a written report in the style of a standard scientific journal in the field must be filed with the major professor of record who will judge its adequacy in the description of the research and the presentation of the results. A comprehensive final examination in the major subject is required of each candidate. No thesis is required. Per UC regulations students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

- 4) **Special requirements:** Poster presentation of research/research objectives at the Graduate Group Research Colloquium is required of year 2 students.

5) **Committees:**

a) **Admissions:** Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Graduate Committee. The Graduate Committee consists of six graduate group faculty and two students. Based on a review of the entire application, a recommendation is made to accept or decline an applicant's request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted through May 31 for the next Fall entering class; students whose applications are received by January 15 have a higher probability of funding and higher probability of admission.

b) **Course Guidance:** The major professor is responsible for the educational direction of the student. These responsibilities include advising on courses to be taken to provide

a broad education in the animal biology, ensuring the student is adequately prepared for research, and guiding the student through a research project. The student should then meet with her/his graduate adviser to assess background, research interests, and goals of the student. The graduate advisor and student should agree to a program of courses for the first year during the first quarter (courses should be entered on M.S. Mentoring Form). The student, major professor, and graduate adviser should discuss any remaining course requirements, course work and preparation for continuing research during the third quarter and the M.S. Mentoring Form should be completed and signed.

c) Thesis Committee and Comprehensive Examination Committee:

Thesis Committee: The student, in consultation with and approval of his/her major professor and graduate advisor, nominate three faculty to serve on the Thesis Committee. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy. The major professor serves as Chair of the Thesis Committee.

Comprehensive Exam Committee: The three faculty are appointed by the graduate advisers acting together and the chair is chosen by the advisers as well. Student and major professor may make suggestions of faculty and why each would be appropriate. Advisers may choose to have major professor on comprehensive exam committee. The comprehensive exam includes examination in the area of general organismal animal biology covering nutrition, genetics, behavior and physiology as well as more in depth examination in one of the disciplines chosen by the student with the advice and consent of the Major Professor. The student's written report of research will be made available to all members of this comprehensive oral exam committee.

6) Advising Structure and Mentoring:

The **Major Professor** is the faculty member who supervises the student's research and thesis; the major professor often has knows the most appropriate courses for a student; this person serves as the Chair of the Thesis Committee. The **Graduate Advisor**, who is appointed by Graduate Studies, is a resource for information on academic requirements, policies and procedures, and registration information and verifies that group requirements are met. The **Graduate Program Staff** assists students with general university policies. The **Mentoring Guidelines** can be found at <http://animalbiology.ucdavis.edu/csa/mentoring.pdf>

7) Advancement to Candidacy:

Every student must file an official application for Candidacy for the Degree of Master of Science after completing one-half of their course requirements and at least one quarter before completing all degree requirements; this is typically the summer following the first year. The Candidacy for the Degree of Master form can be found online at: <http://www.gradstudies.ucdavis.edu/forms/>. A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student's course plan after s/he has advanced to candidacy, the Graduate Adviser must recommend these changes to Graduate Studies. Students must have their Graduate Adviser and committee Chair sign the candidacy form before it can be submitted to Graduate Studies. If the candidacy is approved, the Office of Graduate Studies will send a copy to: the appropriate graduate staff person and the student; the Thesis Committee Chair will also receive a copy, if applicable. If the Office of Graduate Studies determines that a student is not eligible for advancement, the department and the student will be told the reasons for the

application's deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding "I" grades in required courses, or insufficient units.

8) Comprehensive Examination and/or Thesis Requirements:

a) **Thesis Requirements (Plan I):**

Thesis committee meetings: The candidate and major professor should meet at least once a year with the other members of the thesis committee to discuss progress and any changes in research objectives.

Thesis: Research for the Master's thesis is to be carried out under the supervision of a faculty member of the program and must represent an original contribution to knowledge in the field. The thesis research must be conducted while the student is enrolled in the program. The thesis is submitted to the thesis committee at least one month before the student plans to make requested revisions. All committee members must approve the thesis and sign the title page before the thesis is submitted to Graduate Studies for final approval. Should the committee determine that the thesis is unacceptable, even with substantial revisions, the program may recommend the student for disqualification from the program to the Dean of Graduate Studies.

The thesis must be filed in a quarter in which the student is registered or on filing fee. Instructions on preparation of the thesis and a schedule of dates for filing the thesis in final form are available from Graduate Studies; the dates are also printed in the UC Davis General Catalog and in the Class Schedule and Registration Guide issued each quarter. A student must have a GPA of 3.0 for the M.S. degree to be awarded.

b) **Comprehensive Examination (Plan II):**

Fulfillment of the Comprehensive Examination is the last requirement of the M.S. Plan II. A student may take the comprehensive examination once they have advanced to candidacy. However, it is important that the capstone requirement be completed at or near the end of the coursework for the Master's degree; for most students, the exam is taken at the end of the 6th quarter.

The comprehensive examination requirement includes the submission of a written report in the form of a scientific paper to the Comprehensive Examination committee (see section 5) and passing an approximate two-hour oral exam administered by that same committee. The written report must be previously evaluated (and assessed as adequate) by the major professor (a member of the Animal Biology Graduate Group) for its topic, depth and length, description of research and presentation of results.

The scope of the oral exam includes the area of general organismal animal biology, covering the nutrition/feeding, genetics/breeding, behavior and physiology of domesticated animals and examination in more depth in one of the disciplines of animal biology, chosen by the student, with the advice and consent of the Major Professor as well as the written report.

The Exam committee's unanimous vote is required to pass a student on the exam. If a student does not pass the exam, the committee may recommend that the student be reexamined one more time, but only if the Graduate Adviser concurs with the committee. The second exam must take place within one quarter of the first exam. The format of the second exam is the same as that of the first exam. The examination may not be repeated more than once. A student who does not pass on the second attempt is subject to disqualification from further graduate work in the program.

Once passed, the Master's Report Form is signed by the Animal Biology Graduate Adviser and then forwarded to the Office of Graduate Studies. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or in Filing Fee status at the time the program submits the form, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The program must file the report with Graduate Studies within one week of the end of the quarter in which the student's degree will be conferred.

9) **Normative Time to Degree:** Normative time to degree is 6 quarters with 3 quarters being Normative Time to Advancement to Candidacy and 3 quarters being Normative Time in Candidacy.

10) **Typical Time Line and Sequence of Events:** *Students with deficiencies are expected to meet normative time line.*

Plan I:

Year One	Fall	Winter	Spring	Summer
	Course (200 or 100 level)	Graduate level course	Graduate level course	research
	Possible second course	ABG 290	Possible second course	Advance to candidacy
	Research units (ABG 299)	Research units (ABG 299)	Research units (ABG 299)	
Year Two	Fall	Winter	Spring	Summer
	Research units (ABG 299)	ABG 290	Research units (ABG 299)	Write paper for publication
		Research units(ABG 299)	Write thesis	Complete thesis edits

Plan II:

Year One	Fall	Winter	Spring	Summer
	Graduate level course	Graduate level course	Graduate level course	
	Course (200/100 level)	ABG 290	Course (200/100 level)	Advance to candidacy
	Research units (ABG 299)	Research units (ABG 299)	Research units (ABG 299)	
Year Two	Fall	Winter	Spring	Summer
	Graduate level course	ABG 290	Research units (ABG 299)	
	Graduate level course	Graduate level course	Comprehensive Exam	
	Research units(ABG 299)	Research units(ABG 299)		

11) Sources of funding: Most Plan I students are supported by a combination of teaching assistantships, fellowships, and research assistantships from their major professor. Plan II students are eligible for teaching assistantships but are generally not supported by fellowships or research assistantships.

12) PELP, In Absentia and Filing Fee status.

Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state), and Filing Fee status can be found in the Graduate Student Guide: <http://www.gradstudies.ucdavis.edu/publications/>

Ph.D. Degree Requirements

- 1) **Admissions Requirements:** Consideration for program admission requires a bachelor's degree, appropriate undergraduate preparation for proposed area of study, three letters of recommendation, official transcripts, GRE scores, TOEFL or IELTS score (if applicable) and Office of Graduate Studies online application with fee by the stated admission deadline. A minimum GPA of 3.0 is required. Admissions decisions are made on a case-by case basis. Meeting these criteria does not guarantee admission, but merely eligibility. No student is admitted without an identified major professor. The decision to recommend admission to the Dean of Graduate Studies will be made by the Animal Biology Graduate Committee after evaluation of the complete application and includes competitiveness of applicants.
 - a) **Prerequisites:** Appropriate undergraduate preparation for proposed area of study.
 - b) **Deficiencies:** Course work deficiencies should be made up by the end of the first academic year following initial enrollment by earning a letter grade of "B" or better.
- 2) **Dissertation Plan B:** Plan B specifies a three member dissertation committee, a potential final oral examination (determined on an individual students basis by the dissertation committee), and an exit seminar.
- 3) **Course Requirements - Core and Electives (31-43 units)**
 - a) **Core Courses (10 units)**

ABG 200A	Integrated Animal Biology	3 units
ABG 200B	Integrated Animal Biology	3 units
ABG 202	Grant Procurement and Administration	2 units
ABG 401	Ethics and Professionalism in Animal Biology	2 units
 - b) **Elective Courses (21 -33 units)**

PLS 205	Experimental Design and Analysis	5 units
PLS 206	Applied Multivariate Modeling in Agricultural and Environmental Sciences <i>or other appropriate two quarter 200 level statistics series</i>	4 units
ABG 300	Methods in Teaching Animal Biology	2 units or
ABG 396	Teaching Assistant Training Practicum Interdisciplinary courses	2 units 8-20 units (6 units 200 level)
ABG 290	Seminar (or other approved Seminar)	2 units
 - d) **Summary:** 31-43 units are required: 10 units of core coursework, 8 units of interdisciplinary electives (6 of which are to be 200 level), two quarters of graduate level (200) statistics, 2 units of participatory seminars and 2 units of training in teaching animal biology are required for a total of 31 units. Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Courses that fulfill

any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed, although the 12 units per quarter are generally fulfilled with research units (299), research discussion (290C) and seminars. Per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

- 3) **Special Requirements:** Requirements above include training in teaching Animal Biology. Poster presentation of research at the Graduate Group Research Colloquium is required of year 2 students and an oral research presentation is required of third year students. Continued participation in the Research Colloquium is required of more advanced students. Students are expected to advance to candidacy during the fall of their third year and definitely by the end of their third year. A minimum of annual meetings with the dissertation committee as a group are required following advancement to candidacy. An exit seminar is required.

5) **Committees:**

- a) **Admission:** Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Graduate Committee. The Graduate Committee consists of six graduate group faculty and two students as per bylaws. Based on a review of the entire application, a recommendation is made to accept or decline an applicant's request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted through May 31 for the next Fall entering class; students whose applications are received by January 15 have a higher probability of funding and higher probability of admission.
- b) **Mentoring Committee:** Student in conjunction with major professor identifies two additional UC Davis faculty to serve on her/his mentoring committee during the first or second quarter. Graduate advisors approve this committee and the student's graduate advisor may not be a member of his mentoring committee. Student meets with mentoring committee at least once each year. Mentoring Committee is particularly useful in suggesting courses to best meet student disciplinary interest and to help student prepare for qualifying exam. Coursework plan is completed during third quarter as part of annual progress evaluation. The Graduate Advisor is not a member of the Mentoring Committee but the advisors check the coursework plan as part of annual progress evaluation.
- c) **Preliminary Examination Committee:** The Preliminary Examination Committee consists of three faculty members of the group, selected by the Graduate Committee and is the same committee (see exception below) for all students taking the preliminary exam that year. If one of these committee members is the major professor for a student, an alternate faculty member is selected by the Graduate Committee to replace that committee member.
- d) **Qualifying Examination Committee:** The student, in consultation with her/his mentoring committee suggests eight faculty to the Graduate Advisors to serve on the Examination Committee (by the end of the 5th quarter). The graduate Advisors will typically select at least one member not on the student's list and forward five names to the Office of Graduate Studies for formal appointment in accordance with Graduate

Council policy. At least one member of the QE committee is not a member of ABG and the chair of the QE committee is always a member of ABG. The major professor does not serve on the QE committee. The QE Committee conducts the exam and submits results to the Office of Graduate Studies.

e) **Dissertation Reading Committee:**

The Dissertation Committee is a three-member committee nominated by the student, in consultation with the Major Professor and forwarded to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy. The Major Professor, a member of ABG, is chair of the Dissertation Committee. The composition of the dissertation committee is entered on the Advancement to Candidacy Form. The role of the Dissertation Committee is to advise the doctoral student on the research topic and methods and to review the final completed dissertation for acceptance. Students are expected to meet with the Chair of their dissertation committee regularly and with the Dissertation Committee as a group a minimum of once yearly. Dissertation committee members are expected to read and comment on a dissertation within four weeks from its submission. This time limit policy does not apply to summer periods for faculty holding nine-month appointments. The student and faculty will coordinate a timeline for the student to present the dissertation to the dissertation committee. This timeline must allow all dissertation committee members enough time to fulfill their responsibilities within the four-week deadline.

6) **Advising Structure and Mentoring:** The **Major Professor** is the faculty member who supervises the student's research and dissertation; this person serves as the Chair of the Dissertation Committee. The **Graduate Advisor**, who is appointed by the Dean of Graduate Studies, is a resource for information on academic requirements, policies and procedures including those specific to the graduate group, and registration information. The Mentoring Committee serves as a resource for appropriate courses, preparation for the QE, and as an additional resource for initial research guidance. **Graduate Program Staff** assists students with general university policies and graduate group information. The **Mentoring Guidelines** can be found at <http://animalbiology.ucdavis.edu/csa/mentoring.pdf>

7) **Advancement to Candidacy:** Before advancing to candidacy for a doctoral degree, a student must have satisfied all requirements set by the 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. Normally, students advance by the end of the 7th quarter; students must pass their QE by the end of the ninth quarter in order to remain eligible for academic appointments (TA, GSR, AI, etc.). 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://gradstudies.ucdavis.edu/gradcouncil/policiesall.html>.

8) **Qualifying Examination and Dissertation requirements:**

a) **Preliminary Examination**

In September following completion of both quarters of the core course (ABG 200A and ABG 200B), students will take an oral preliminary examination (1-2 hours). The focus of this exam will be the material covered in 200A and 200B, the breadth of Animal Biology and include species comparisons of organismal biology. This exam ensures that the student has the necessary breath of knowledge in organismal animal biology.

Students who do not pass the Preliminary Examination the first time will have one additional opportunity to take the exam in December of their second year. If the student does not pass the preliminary exam by the end of the 4th quarter, the graduate advisor will recommend to Graduate Studies that the student be disqualified from the program.

b) Qualifying Examination

1. General Information

All students will complete all course requirements before taking their Qualifying Examination. Passing this exam makes the student eligible for advancement to candidacy. (Students may take the Qualifying Exam during the quarter that they are taking the last required course but cannot advance to candidacy until they have passed all required courses.) The qualifying exam should be taken by the (7th) quarter and passed no later than the end of the (9th) quarter after admission to the Ph.D. program.

The primary purpose of the Qualifying Examination (QE) is to validate that the student is academically qualified to conceptualize a research topic, undertake scholarly research and successfully produce the dissertation required for a doctoral degree. The QE must evaluate the student's command of the field, ensuring that the student has depth of knowledge and does not focus solely on the proposed dissertation research. No more than half of the exam should concern the proposed dissertation research. In addition, the QE provides an opportunity for the committee to provide important guidance to the student regarding his or her chosen research topic. The Qualifying Examination is an oral examination although a written research proposal is required in advance of the examination.

2. Written Research Proposal

The research proposal must be provided to members of the qualifying examination committee at least 7 days before the qualifying exam. This proposal is to be 3-5 pages, describing specific research aims, hypotheses, progress to date, and experimental approach. Concepts within the research proposal can be discussed with others (such as the student's major professor and peers) prior to submission.

3. Oral Portion of the Exam

The oral portion of the qualifying exam will be approximately 3 hours in length and is intended to evaluate the student's eventual ability to pursue independent research. Students should demonstrate independent and creative thinking and the ability to synthesize broad concepts with critical evaluation. Students should also defend two disciplinary areas of animal biology in depth. These two disciplinary areas were suggested by the student at the same time that potential members of the qualifying exam were suggested and are part of the rationale for selection of faculty nominees for the QE committee by the Graduate Advisors. The Graduate Advisors as a group may have accepted the initial disciplinary suggestions, modified the suggestions or engaged in further dialog with the student if the areas are inappropriate to the group or too narrow or too broad. Student was informed of the final wording of the two disciplinary areas with the paperwork submitted to graduate studies.

4. **Outcome of the Exam**

The committee will reach a decision on the student's performance immediately after the oral exam. The committee, having reached a unanimous decision, shall inform the student of its decision to:

- "Pass" (no conditions may be appended to this decision),
- "Not Pass" (the Chair's report should specify whether the student is required to retake all or part of the examination, list any additional requirements, and state the exact timeline for completion of requirements to achieve a "Pass"),
or
- "Fail".

If a unanimous decision takes the form of "Not Pass" or "Fail", the Chair of the QE committee must include in its report a specific statement, agreed to by all members of the committee, explaining its decision and must inform the student of its decision. Having received a "Not Pass" the student may attempt the QE one additional time; the QE report must list the specific conditions and timing for the second exam. After a second examination, a vote of "Not Pass" is unacceptable; only "Pass" or "Fail" is recognized. Only one retake of the qualifying examination is allowed. Should the student receive a "Fail" on the first or second attempt at the exam, the student will be recommended for disqualification from the program to the Dean of Graduate Studies.

In the event of a split committee vote, the chair of the QE committee will inform the student that the committee is divided and submit to Graduate Studies, with a copy to the student's file, a written summary of the committee vote and decision, accompanied by text supporting individual viewpoints. Text should address the student's performance in the individual areas of the examination, as well as performance overall. Graduate Council has authorized the Dean of Graduate Studies to make the final decision when the committee does not reach a unanimous decision.

c) **The Dissertation**

1. **Exit Seminar**

The dissertation follows Plan B with a required exit seminar. Satisfaction of this requirement must be verified by the Dissertation Committee Chair. The Exit Seminar is a formal public presentation of the student's research before the program faculty and students. The Dissertation Committee chair should not sign the Dissertation until after the exit seminar has taken place. Adequate scheduling of the exit seminar is the responsibility of the student.

2. **Dissertation: General Requirements**

Filing of a Ph.D. dissertation with the Office of Graduate Studies is normally the last requirement satisfied by the candidate. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or in Filing Fee status at the time of filing a dissertation, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The Ph.D. Dissertation will be prepared, submitted and filed according to regulations instituted by the Office of Graduate Studies <http://gradstudies.ucdavis.edu/students/filing.html>. Satisfaction of this requirement must be verified by the Dissertation Committee Chair.

3. Dissertation:

The research conducted by the student must be of such character as to show ability to pursue independent research. The dissertation reports original, scholarly work of publishable quality that addresses a significant scientific problem in the field and is carried out under the supervision of a member of graduate group while the student is enrolled in the program. The chair of the dissertation committee must be a member of the graduate group and must be involved with the planning and execution of the experimental work done to formulate the dissertation. The major professor's laboratory is the setting for most of the student's research activities, unless an alternative site and immediate supervisor are approved by the dissertation committee.

Students should meet regularly with their dissertation committee. The dissertation must be submitted to each member of the dissertation committee at least one month before the student expects to make requested revisions; committee members are expected to respond within 4 weeks, not including summer months for nine month faculty. Informing committee members of progress as writing proceeds helps the members to plan to read the dissertation and provide feedback within this time frame. The dissertation must be approved and signed by the dissertation committee before it is submitted to Graduate Studies for final approval.

9) Normative Time to Degree

Normative time to degree is 15 quarters with 7 quarters being Normative Time to Advancement to Candidacy and 8 quarters being Normative Time in Candidacy.

10) Typical Time Line and Sequence of Events

Students should plan to complete any deficiencies during the first two years such that they are able to schedule their qualifying examination during or before their 7th quarter.

Year One	Fall	Winter	Spring
	200A Integrated Animal Biology	200B Integrated Animal Biology	401 Ethics and Professionalism in Animal Biology
	PLS 206 Applied Multivariate Modeling in Agricultural and Environmental Sciences	200 level course	200 level course
	ABG 300	ABG 299 research units	ABG 290
	ABG 299 research units	ABG 396	ABG 299 research units
Year Two	Fall (Preliminary Exam completed)	Winter	Spring
	202 Grant Procurement and Administration	PLS 205 Experimental Design and Analysis	ABG 299 research units
	200 level course	ABG 290	
	ABG 299 research units	ABG 299 research units	Qualifying Exam Preparation
Year Three-Five	Fall (advancement to PhD candidacy- year 3)	Winter	Spring
	Dissertation Research and Completion		

- 11) **Sources of funding.** Most students are supported by a combination of teaching assistantships, fellowships, and research assistantships from their major professor.
- 12) **PELP, In Absentia and Filing Fee status.** Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state), and Filing Fee status can be found in the Graduate Student Guide: <http://www.gradstudies.ucdavis.edu/publications/>
- 13) **Leaving the Program Prior to Completion of the PhD Requirements.**

Should a student leave the program prior to completing the requirements for the PhD, they may still be eligible to receive the Masters if they have fulfilled all the requirements (see Masters section). Students can use the Change of Degree Objective form available from the Registrar's Office:

<http://registrar.ucdavis.edu/PDFFiles/D065PetitionForChangeOfGraduateMajor.pdf>