

Guide for Graduate Students

Department of Biology
University of Louisiana at Lafayette
Lafayette, LA 70504

(Fall 2011)

I. INTRODUCTION

The Department of Biology offers programs of study leading to the degrees of Doctor of Philosophy in Environmental & Evolutionary Biology and Master of Science in Biology.

The purpose of the graduate program is to help students to develop their capacities for study and research. During graduate study, students are expected to increase their comprehension of biology and their experience and skill in the special techniques necessary for professional work in the biological sciences. These things will be accomplished through the interactions with a major advisor, who will guide the student's graduate studies and research.

Graduate students should conduct themselves as professional biologists, maintaining high standards of scientific integrity, ethics, and performance. Graduate students should exceed minimum requirements of all kinds; their goal should be to master subjects, rather than to simply comply with formal requirements.

Students are expected to broaden their outlook and to enlarge their background by reading professional journals regularly; by attending lectures, seminars, and meetings; and by becoming familiar with the reference materials available in their field. Membership in one or more national professional societies is strongly recommended.

II. DOCTOR OF PHILOSOPHY

This program emphasizes environmental and evolutionary biology. Students in the program are expected to concentrate their dissertation work in an area of active faculty research.

1. Doctoral Advisory Committee and Defense of the Dissertation Proposal

The doctoral advisory committee is constituted during the student's first year in residence in the program. Committee members are selected based on the student's interests and the major advisor's guidance, and the proposed membership is submitted to the Graduate Studies Committee for approval. The advisory committee must include a minimum of five doctoral-level scientists. At least three of the committee members must be regular, non-adjunct members of the biology department on the UL Lafayette Graduate Faculty. The other committee members can include adjunct or regular faculty members from biology, other departments, or other institutions. At least one committee member must be from outside the department; this outside member may be an adjunct member of the faculty.

The student's major advisor is a member of the committee and serves as chair. Only members of the Graduate Faculty can chair or co-chair a committee. Students wishing to have an adjunct member serve as the major advisor are required to have a co-chair, if the adjunct faculty member has not previously chaired a committee in the department. An adjunct serving as a chair or co-chair can not be considered as an outside member.

Meetings of the advisory committee are called by the major advisor after consultation with the student. The advisory committee should meet with the student at least once per year to advise the student and to judge the student's progress. The first meeting should be no later than the end of the student's second semester. The purposes of this meeting will be to advise the student about graduate course work, discuss the student's initial plans for dissertation research, and judge the student's progress in the first year. At least two weeks prior to the first or second committee meeting, the student should submit a dissertation proposal that has been developed with the major advisor's input. The student will then receive feedback and answer questions about the proposal at the committee meeting. After the conclusion of course work and successful defense of the proposal, the committee will administer the comprehensive examination. The major advisor, in consultation with the other committee members, will determine when sufficient research has been accomplished for dissertation preparation.

2. Course Requirements

At least 24 hours of non-dissertation graduate credit are required for students who enter the program with a master's degree. Students entering the program without a master's degree are required to earn at least 48 hours of non-dissertation graduate credit. All students in the program must comply with the University Ph.D. requirement of 72 hours of graduate credit subsequent to earning the bachelor's degree; at least 48 of these hours must be in non-dissertation coursework. The required courses must be taken in residence in the doctoral program. At least 9 credits must be in environmental biology, and 9 in evolutionary biology; a list of these courses is provided with this handbook (this requirement applies only to doctoral students). For students with a masters degree, at least 12 of the 24 required credits must be at the 500-600 level, including two hours of Graduate Seminar. Students without a masters degree are required to take 24 hours of credits at the 500-600 level. Students will also take 1 hour of BIOL 550 Colloquium in Biological Science each semester they are in residence; this course does not count toward the credit hours required for the degree. The specific program of study for each student will be proposed after consultation between the student and major advisor, and must be approved by the advisory committee at the first committee meeting. It is recommended that the student take at least one course at another institution, field station, or marine laboratory. Unless required by a student's committee, there is no foreign language requirement.

3. Special Requirements

Doctoral students must present a departmental seminar once every two years; Doctoral Fellows must present a seminar once every year. Presentations at the annual Graduate Student Symposium fulfill this requirement.

A manuscript, acceptable to the student's committee, must have been submitted to an appropriate refereed journal prior to the scheduling of the oral defense of the dissertation. The student must be sole or first author on the manuscript.

4. Comprehensive Examination

The comprehensive examination is scheduled by the major advisor and is administered by all members of the student's advisory committee. A doctoral student must take the comprehensive examination (a) before the end of the second year of the doctoral program if the student entered with a master's degree, or (b) before the end of the third year of the doctoral program if the student entered with a bachelor's degree.

Before taking the comprehensive examination, the student must complete the following requirements: (a) all courses required by the student's advisory committee, (b) any language requirement made by the student's committee, and (c) the defense of the dissertation proposal. **It is important that the student plan to complete these requirements in the first two years of doctoral study (three years for those without a master's degree) so as to complete the comprehensive examination in the required period of time.**

The examination consists of a written portion that will be administered 2-4 weeks before the oral examination. The student will be examined on general biological knowledge and areas specific to his/her research. To be considered successful, there may be no more than one dissenting committee member and at least 3 of the consenting votes must be from members of the University's graduate faculty. The committee chair may require that any positive decision be based on unanimous approval by the committee. If the student fails to perform satisfactorily on the examination, a second examination may be permitted at the discretion of the advisory committee. If a student fails the examination, the advisory committee may determine that the student should be dismissed from the program. The student may appeal dismissal to the Biology Graduate Appeals Committee and the Student Appeals Committee of Graduate Council.

5. Admission to Candidacy

Admission to candidacy follows satisfactory completion of the course work, any language requirements imposed by the committee, approval of the dissertation proposal, and the comprehensive examination. The "Application for admission to candidacy" form needs to be filed with the Graduate School and Biology Graduate Coordinator. After admission to candidacy the student cannot change the composition of the advisory committee; exceptions can be permitted through the departmental graduate appeals committee.

6. Dissertation

A specific research project must be completed and a formal dissertation must be submitted to

and approved by the student's advisory committee. For a dissertation to be approved there may be no more than one dissenting committee member and at least 3 members of the graduate faculty must approve. The committee chair may require that any positive decision be based on unanimous approval by the committee.

7. Final Examination

The final examination is an oral presentation and defense of the dissertation research. The examination is administered by the student's advisory committee after it has approved a complete draft of the dissertation. The presentation must be held on campus during normal business hours. The time and location of the oral presentation must be announced in advance, and the presentation is open to the public. The doctoral candidate and advisory committee will meet immediately after the oral presentation for the oral defense. To be considered successful, there may be no more than one dissenting committee member and at least 3 of the consenting votes must be from members of the University's graduate faculty. The committee chair may require that any positive decision be based on unanimous approval by the committee.

8. Graduation

Before submission of the dissertation to the Graduate School, the completion of all requirements must be verified via the departmental Graduation Approval Form. Prior to graduation, the student must make available to the major professor a copy of all unpublished research data.

III. MASTER OF SCIENCE

The Master of Science program has a thesis and a non-thesis option. The thesis option is recommended for students interested in pursuing additional graduate training and careers in research. The non-thesis option is recommended for students seeking a terminal graduate degree for a career that does not require research experience and for those interested in future study at a professional school. Students admitted under one option may switch to the other with the approval of their Advisory Committee and the Graduate Studies Committee.

1. Master's Advisory Committee

The student's major advisor is a member of the committee and serves as its chairman. Only members of the Graduate Faculty can chair or co-chair a committee. Students wishing to have an adjunct member serve as the major advisor are required to have a co-chair, if the adjunct faculty member has not previously chaired a committee in the department.

Meetings of the advisory committee are called by the major advisor after consultation with the student. The committee members are selected based on the student's interests and the

major advisor's guidance. The proposed membership is submitted to the Graduate Studies Committee for approval. The advisory committee must include a minimum of three regular, non-adjunct members of the biology department who are members of the University's Graduate Faculty. Additional members do not need to be affiliated with the University.

Thesis Option: The advisory committee is constituted and should meet with the student before the end of the student's first semester. The purposes of this meeting will be to advise the student about graduate course work, discuss the student's initial plans for thesis research, and judge the student's progress. Thesis track students should arrange another meeting for defense of the thesis proposal. At least two weeks prior to this meeting, the student should submit a thesis proposal that has been developed with the major advisor's input. The student will then receive feedback and answer questions about the proposal at the committee meeting. The committee will meet at least once per year thereafter to advise the student and judge the student's progress.

Non-Thesis Option: The major advisor for non-thesis students is assigned by the Graduate Coordinator, in consultation with the student. The primary function of the committee of non-thesis students is to administer the comprehensive and final examinations (see below). Non-thesis students are encouraged to form an advisory committee and consult with committee members early in their degree program, so they can adequately prepare for these examinations through choices in course work and study.

2. Course Requirements

Thesis Option A candidate for the degree of Master of Science must present acceptable grades for a minimum of 30 hours of courses approved for graduate credit, including not more than 6 hours devoted to thesis. Of the 24 non-thesis hours, at least 18 must be from courses in the Department of Biology. At least 12 of the non-thesis hours must be in courses at the 500 level or above, including 2 hours of the Graduate Seminar in biology. Students will also take 1 hour of BIOL 550 Colloquium in Biological Science each semester they are in residence and funded as a TA, RA, or fellow; this course does not count toward the credit hours required for the degree.

Non-Thesis Option: A candidate for the degree of Master of Science must present acceptable grades for a minimum of 36 hours of courses approved for graduate credit, including not more than 3 hours devoted to Advanced Problems (BIOL 560, 561, and 564). Thesis hours (BIOL 599) cannot be applied to this requirement. At least 30 hours must be from courses in the Department of Biology. At least 18 hours must be in courses at the 500 level or above, including 2 hours of the Graduate Seminar in biology. Students will also take 1 hour of BIOL 550 Colloquium in Biological Science each semester they are in residence and funded as a TA, RA, or fellow; this course does not count toward the credit hours required for the degree. At least 3 hours of graduate course work must be in a physical science or mathematics, outside of biology

(this course must be approved by your advisor and the graduate studies chair and cannot be a special topics or independent studies class).

3. Thesis

A specific research project must be completed under the direction of the major advisor, and the formal thesis must be approved by the student's advisory committee. This applies only to students in the thesis track.

4. Admission to Candidacy

Before applying for candidacy, the student's plan of study must be approved by the advisory committee. After a student has completed 12 semester hours of graduate degree credit with a grade-point average (GPA) of 3.0 or better and is classified in regular admission status, he/she will submit an Admission to Candidacy form to the Graduate School and the Biology Graduate Coordinator. This application must be signed by each committee member and submitted prior to the tenth day of classes in the next semester after the student has become eligible to apply for admission to candidacy. In the event that a student's GPA is below 3.0 at the time he/she completes the first 12 semester hours, he/she must submit the application for candidacy immediately upon attaining a 3.0 average. After admission to candidacy the student cannot change the composition of the committee; exceptions can be permitted through the departmental graduate appeals committee.

5. Comprehensive Exam

A comprehensive examination will be given by the student's advisory committee. The comprehensive exam is to be given at least one month prior to the final oral examination and is devoted to testing the student's knowledge of general biological principles. To be successful, there must be positive votes from at least three advisory committee members who are also members of the graduate faculty. For committees constituted of more than three members, there is the added stipulation that there may be no more than one disapproving vote from a committee member. The committee chair may require that any positive decision be based on unanimous approval by the committee. If the student fails to perform satisfactorily on the comprehensive examination, a second examination may be permitted, at the discretion of the advisory committee.

6. Final Exam

Thesis track: The final examination consists of an oral presentation and defense of the thesis research. This examination is administered by the student's advisory committee after it has approved a complete draft. The presentation must be held on campus during normal business hours. The time and location of the oral presentation must be announced in advance, and the presentation is open to the general public. The graduate student and the advisory committee will meet immediately after the oral presentation for the oral defense. To be approved, there must

be positive votes from at least three advisory committee members who are also members of the graduate faculty. For committees constituted of more than three members, there is the added stipulation that there may be no more than one disapproving vote from a committee member. The committee chair may require that any positive decision be based on unanimous approval by the committee.

Non-thesis track: The final oral examination consists is administered by the student's advisory committee. Subject matter will include both general topics in biology as well as specialized topics as determined by the committee. To pass the exam, there may be more than one dissenting committee member. To be successful, there must be positive votes from at least three advisory committee members who are also members of the graduate faculty. For committees constituted of more than three members, there is the added stipulation that there may be no more than one disapproving vote from a committee member. The committee chair may require that any positive decision be based on unanimous approval by the committee.

IV. GENERAL REQUIREMENTS AND INFORMATION

1. Graduate Student's Advisor

The major advisor is the student's primary director of research and monitor of progress and standards in the program of graduate study. The major advisor is also the usual liaison between the student and the departmental administration. Design and execution of research and course studies should be conducted with regular consultation between the student and major advisor. The student should make an effort to become familiar with policies and expectations of his/her major advisor early in the progress of graduate study. Likewise, the major advisor should strive to keep his/her graduate student(s) well informed of any policies and/or expectations beyond those stated in the Graduate Bulletin and departmental guidelines.

If a student decides to change advisors, the student must inform the Graduate Coordinator about this transition. If a student's advisor leaves permanently and the student decides to remain to complete his/her degree, the Graduate Studies Committee will advise the department head and faculty concerning the composition of the student's committee.

2. Thesis and Dissertation

Each student should obtain a copy of the Thesis/Dissertation Guide from the Graduate School office. This guide sets forth style and preparation requirements of the Graduate School. The thesis or dissertation should be organized and written in a form suitable for publication; this can best be achieved by using journal articles as models. The student is financially responsible for the preparation and binding of all copies of the thesis.

3. Seminar attendance

Students are required to attend all departmental seminars. As part of this requirement, students

are required to register for Biology 550, Colloquium in the Biological Sciences, each semester they are in residence and being funded through a TA, RA or fellowship, unless they have a conflict resulting from teaching obligations or a scheduled class. Students should bring conflicts preventing them from attending seminar (field trips, research travel, illness) to the attention of the seminar chair.

V. PROCEDURES FOR DISMISSAL FROM THE GRADUATE PROGRAM

A student who fails to achieve a graduate grade point average above the minimum specified by the Graduate School will be dismissed from the graduate degree program.

Regardless of the GPA, a student who obtains three (3) grades of C will be dismissed from the graduate program. Students who were admitted in conditional status become ineligible to continue in the graduate program if they receive two (2) grades of C.

A student can also be dismissed from the degree program by the department. To remain in the degree program, master's students must maintain a major advisor and two other members on their Advisory Committees; doctoral students must maintain a major advisor and four other committee members. If the advisor or any other member of the Advisory Committee resigns, and if the student is unable within two months to find a faculty member who agrees to replace the resigned committee member(s), then the student may no longer work toward a graduate degree in the department.

If a student did not enroll in the graduate program for more than one year (two consecutive semesters), the student must apply for readmission by the department. Readmission does not result in academic amnesty, or modify or extend any regulations. After readmission, the committee must be reaffirmed.

VI. APPEALS

All appeals for exceptions to or exemptions from these policies should be made in writing to the departmental Graduate Appeals committee, which is chaired by the Graduate Coordinator. Addressing departmental policy through this process does not eliminate the need to appeal Graduate School policy decisions to the Student Appeals Committee of the Graduate Council.

VII. TEACHING ASSISTANTSHIPS

1. The Teaching Assistantship is expected to require about 20 hours of effort per week. Duties include preparation, teaching, testing, holding office hours, and proctoring examinations for faculty members. Duties not directly related to teaching may also be assigned.
2. Teaching Assistants are required to be present at the beginning of the semester, to allow for start-up lab meetings and last-minute TA assignments. Normally semester begins 3 business days before the first day of classes.

3. Teaching Assistants are required to attend the classes to which they are assigned, and to remain on campus at the end of each semester until all of their responsibilities have been met. Grades must be turned in to the college electronically. Proctoring assignments and cleanup of the teaching facilities must also be completed before departure from campus.
4. Emergencies and conflicts will occur. It is important that you make arrangements prior to any absences and notify the instructor or laboratory coordinator as early as possible. Absences other than hospitalization are not acceptable without prior written consent from the instructor or lab coordinator who also must approve all arrangements to cover your teaching responsibilities during a necessary absence.
5. Failure to fulfill your duties and obligations will jeopardize your current funding as well as your ability to compete for future funding. With appropriate foresight and consideration, most conflicts can be avoided. If you have any questions concerning absences, they should be discussed promptly with your instructor or laboratory coordinator.
6. Graduate students with Teaching Assistantships are obligated, as part of the assistantship, to render assistance to faculty and/or staff when asked. The department makes every effort not to assign teaching duties that conflict with the student's class schedule.
7. Graduate students may be employed during the summer term as Temporary Laboratory Assistants provided that funds are available and need exists for their services.
8. Teaching Assistantships are awarded one semester at a time. Each graduate student who desires an assistantship will be asked to submit an assistantship request sheet, which has been approved by the student's major advisor, to the Graduate Studies Committee.
9. New assistantships and renewals must be approved by the Graduate Faculty.
10. Most full-time Master's degree candidates should be able to complete the requirements for the Master of Science degree in two years, whereas most full-time doctoral candidates should complete the requirements for the Doctor of Philosophy degree in 4-5 years. A master's student who has held an assistantship for a total of 4 semesters may have lower priority for assistantship renewal than newly admitted students or continuing students who have been supported for a shorter period.
11. Graduate students who hold assistantships must be full-time students during any semester in which the assistantship is held. During a regular semester, full-time status requires registration for 9 semester hours. During the summer, full-time status requires registration for 4 semester hours.
12. International students holding Teaching Assistantships must be evaluated for their ability to communicate in English prior to assuming classroom responsibilities associated with their assistantship. Students must arrange to be evaluated through the Departmental

Administrator. If their mastery of English is deemed to be insufficient to teach, international students holding TAs must attend an approved ESOL (English for Speakers of Other Languages) course to strengthen their English-speaking skills. Students required to take ESOL training will perform non-teaching activities as their assistantship responsibilities; salary support might also be less than that of students that fulfill all the requirements of their TAs. If after two semesters of ESOL coursework a student's English is still inadequate to serve as a laboratory instructor, the student's priority for additional renewals of their teaching assistantship will be reduced. If students have a course conflict that prevents them from taking the ESOL course one semester, they must request an exemption from the ESOL course in order to retain their TA. This request should be made in writing prior to the beginning of the semester. If approved by the Graduate Coordinator, the request will be forwarded to the Graduate Dean for review.

13. International students currently funded through other sources must be tested and, if necessary, undergo ESOL training prior to applying for Teaching Assistantships in future semesters. Failure to address this requirement prior to applying for a Teaching Assistantship will reduce the priority of continuing international students for funding.

VIII. DEPARTMENTAL PROCEDURES AND INFORMATION

1. Keys and Space Assignment

Procurement of needed keys and assignment of work space must be authorized by the student's major advisor and the head of the Department of Biology. It is the student's responsibility to refuse to admit unauthorized persons into the building, laboratories, and offices. The University requires keys to be returned before a student can participate in Commencement and receive the degree; the major advisor should ensure that all keys are returned before the student leaves the University.

2. Mail

A departmental mailbox will be assigned to each graduate student. Graduate students are allowed to use the departmental mailing address for professional mail:

Regular Mail:

**Department of Biology
P.O. Box 42451
University of Louisiana at Lafayette
Lafayette, LA 70504-2451**

Courier Delivery (E.g., FedEx, UPS, etc.):

**Department of Biology
300 E. St. Mary Blvd, Rm. 106
University of Louisiana at Lafayette
Lafayette, LA 70504**

Letterhead stationery of the University is not to be used for personal correspondence, but may be used for professional correspondence. Graduate students do not have franking privileges for correspondence, except with permission of their advisor.

3. Departmental Secretary

Graduate students do not have the privilege of departmental secretarial services or the use of secretarial supplies other than those that may be required in association with classroom teaching. TAs may have teaching materials duplicated by the departmental secretary.

4. Supplies and Equipment

Equipment and supplies obtained for a student's use and paid for by the department remain with the student's advisor when the student leaves the University. This includes any publications photocopied and paid for by the department or a funding agency.

5. Departmental Field Vehicles

Graduate students may use certain vehicles for research only if they hold a valid Louisiana driver's license and have participated in a safe-driving course. A CD with an approved version of the course is available from the departmental office. Vehicles designated "For faculty use only" may not be used by graduate students. It is very important that the interior and exterior of a vehicle be cleaned upon completion of use. A "Departmental Vehicle Use Form" and a "University Request for Official Travel" form must be filled out to use the vehicles. Vehicles are for official use only and can not be used to transport family, friends, or pets.

6. Travel

If funded as a Teaching Assistant or a Fellow, a student is expected to be present when the University is in session. For most students, this includes the 9 month academic year; for BOR fellows this includes summer session. The TA or Fellow should return to campus no later than the official the start of the semester (usually 3 working days before the first day of classes), and should plan on remaining on campus through Commencement, with the exception of weekends and holidays. Students needing to travel during work periods for personal or professional reasons should fill out and file a "Request for Official Travel" form, as well as inform their advisor (and supervisor in case of teaching responsibilities). It is the student's responsibility to resolve any difficulties that may result from their absence. Research Assistants should follow these general procedures unless other policies have been established by their advisor/supervisor. Students seeking reimbursement for travel expenses should complete their travel requests at least 10 prior to the start of travel.

7. Research Expenses

Requests for reimbursement of expenditures for research must be submitted by the student's major advisor. Long distance telephone calls pertaining to research may be charged to the department upon permission of the student's advisor.

8. Graduate Student Organization (GSO)

Students should be aware that the GSO provides limited support for research activities. Contact

the departmental GSO student representative or the GSO office for more information.

9. Collections

Materials, such as biological specimens, collected by a student for use in research become the property of the Department of Biology and the State of Louisiana. Exceptions may be made only by agreement between the student and the major advisor; such agreements may also need to be made with a relevant permitting agency, if applicable.

10. Publications

Students are encouraged to publish and to present papers at professional meetings. They must maintain close communication with and have approval of their major advisor in regard to the form and content of any publication or paper which bears the departmental address or stems from work in departmental laboratories.

11. Museum Loans

Graduate students must obtain permission of their major advisor prior to requesting specimen loans from other institutions. Typically, museums send loans only to researchers in permanent positions (such as advisors).

12. State Property

No University equipment may be taken home or left in personal vehicles without permission. Students needing to take tagged equipment off campus need to have an approved Custody Receipt form on file in the departmental office. This form can be obtained from the web site for the physical plant; blank copies are also available in the main biology department office.

13. Computers

Use your computer and campus internet access for official business only.

IX. Additional Guidelines:

1. Upon arrival on campus, please make sure that your status corresponds with the information provided to you from the Graduate school and Department of Biology. This is especially important for the recipients of fellowships or Teaching Assistantships.
2. In consultation with your advisor, you should select an Advisory Committee (see above) as early as possible and file the required form(s) with the Graduate Coordinator.
3. Students admitted with Conditional Status need to petition for Regular Status after completing 12 credit hours. Provide a copy of the application to the Graduate Coordinator.
4. Every year a progress report (Annual Evaluation and Funding Request Form) must be filed with the Graduate Coordinator.

5. Students funded through Research Assistantships, should make sure that the appropriate administrative form(s) are used for financial support.
6. Students who intend to transfer graduate credit from other schools need to file an application for Transfer of Graduate Credit. Twenty four hours of credit, obtained at the grade of B or better, while earning an M.S. degree from a US institution are automatically applied to the 48 hours required to earn a Ph.D.
7. Once international students have obtained regular status, they may petition to have graduate credits completed outside the US applied to their degree. This request should be made to the Graduate School in the form of a letter signed by the student. The letter should specify titles of the courses in English, a brief description of the course content (similar to the course descriptions in the UL Lafayette Bulletin), equivalent courses taught at UL Lafayette (if they exist), the grades earned, and the number of credits earned. The student's advisor should also write a letter verifying that the credits were earned at the graduate level from an appropriate educational institution. The transfer of up to 6 hours is fairly standard, upon request. Requests for transfer of additional hours must be considered by the Student Appeals Committee of the Graduate Council and may require additional justification.

Courses that fulfill the 9/9 hr requirement for graduate classes taken for the Ph.D. program in the Biology Department. Revised July 2011. Students need 9 credit hours from each of the columns below.

Environmental Biology	Evolutionary Biology
407(G) Environmental Toxicology	403(G) Virology
408(G)/409 Plant Physiology/Lab	405(G) Mammalogy
412(G) Conservation Biology & Biodiversity	413(G) Herpetology
416(G) Biogeography	414 (G) Ornithology
418(G) Microscopy Theory and Applications	425(G)/426 Developmental Biology/Lab
427(G) Experimental design and Analysis	433(G) Plant Systematics & Biodiversity
428(G) History of Ecological Modeling	445(G) Ichthyology
441(G) Limnology Oceanography	453(G) Molecular & Cellular Engineering
457(G)/458 Cell Biology/Lab	455(G) Molecular Biology
461(G) Aquatic Wetland Vascular Plants	485(G) Marine Botany
480(G)/481 Marine Microbiology/Lab	501 Population Genetics
482(G) Comparative Physiology	507 Molecular Evolution
502 Quantitative Ecology	519 Invertebrate Zoology
504 Advanced Microscopy	526 Genetics & Physiology of Microorganisms
503 Ecological Modeling	542 Evolutionary Ecology
508 Community Ecology	554 Pathogenic Microbiology
575 Statistical Ecology	558 Evolution and Adaptation Arthropods
580 Marine Ecology	559 Systematic Methods
604 Adv Topics Cell Molecular Biology	607 Adv Topics Evolutionary Biology
605 Adv Topics Environ Biology	609 Behavioral Ecology
615 Biochemical Adaptations to Environment	670 Evolutionary Processes

Dissertation research (699), seminars (551,552), research problems (560, 561, 564), and special projects (595) do not count toward this requirement.

Up to 3 hours of graduate level course work in each of the two subject areas, taken elsewhere or as part of a graduate program, may be applied toward fulfillment of this requirement with the approval of the student's advisory committee and the chair of the Grad Studies Committee. After obtaining committee approval for the use of credits obtained in an earlier program, the student should email the courses they

wish to use to the graduate coordinator for final approval (ccing the student's advisor).
Note that if you have an MS from a US institution, there is no need for formally transfer courses from that degree to use them to count toward the 9/9 requirement as all courses from MS degrees in the US are automatically transferred. You just need the approvals discussed above. Also note that using these courses toward the 9/9 requirement does not alter the number of total hours required toward graduation.