

# **GRADUATE STUDENT HANDBOOK**

**Department of Biological Sciences  
Mississippi State University**

**Fall 2008 Edition**

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**MSU Department of Biological Sciences**  
**Fall 2008 Edition**

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## INTRODUCTION

The Graduate Faculty of the Department of Biological Sciences at Mississippi State University welcome you to our graduate program. We hope to impart to you a core of knowledge as well as a set of skills that will prepare you for a successful career. The core of knowledge includes both the basic principles of biology and the focused information within your area of specialization. The set of skills includes the ability to speak and write clearly, to critically evaluate the scientific literature, and to gather, analyze, and publish scientific findings. Our objective is to enable you to use the skills and knowledge you acquire here to become an independent scientist. We appreciate the confidence you have displayed in us by choosing our graduate program, and we wish you success with this aspect of your education.

This **Graduate Student Handbook** contains the policies and guidelines for graduate students within the Department of Biological Sciences. **The student also must follow the policies of the Graduate School contained in the *Bulletin* of the Mississippi State University Graduate School, as well as any subsequent memoranda issued by the Graduate School.**

The Department office will provide assistance with required forms, provided such assistance is sought in a timely manner, but such requests must be initiated by the student. More information on these forms, as well as other policies pertaining to successful completion of graduate studies, is provided in the following pages. A companion document, "*Biological Sciences Graduate Student Survival Guide*," also is available from the Graduate Coordinator or through the Biological Sciences Graduate Student Association.

**Although we wish to create a atmosphere favorable for learning and scientific pursuits, it ultimately is the student's responsibility to become familiar with and to adhere to the policies and deadlines of the Department and the Graduate School. Failure to do so will jeopardize the student's standing in the graduate program, including any financial support provided by the Department or University.**

### *Important Definitions*

*Graduate Committee* – This phrase refers to the standing Department Graduate Advisory Committee. This Committee is meant to periodically review Departmental Graduate Program matters and to serve additional ancillary functions, as described in this document.

One of the functions of the departmental Graduate Committee is to attempt to resolve difficulties that may arise during a student's program. The student has the opportunity to bring such concerns and appeals to the Graduate Committee for discussion and resolution. Students are urged to talk with the Graduate Coordinator or any members of the Committee about any concerns pertaining to their graduate experience.

*Advisory Committee* – This refers to the specific advisory committee formed in support of a Graduate Student's thesis or dissertation studies. This committee provides direct and specific guidance to the student as he or she progresses through the Biological Sciences Graduate Program. Formation of this committee is discussed on pages 7, 10, and 14.

## DEGREES OFFERED AND ADMISSION STANDARDS

### Degrees offered through our on-campus graduate program

The Department of Biological Sciences offers the Master of Science Degree (M.S.) and the Doctor of Philosophy Degree (Ph.D.) in Biological Sciences.

### Minimum standards of admission

#### *Regular admission*

Students are eligible for admission who have received at least a 2.75 GPA on their undergraduate coursework and 3.0 in life science courses. Students are required to submit scores for the Graduate Record Examination (GRE) and Test of English as a Foreign Language (TOEFL). Although there is no minimum GRE score required for admission, the screening committee is looking for consistency between an applicant's GRE scores and his/her undergraduate GPA. In the past, the majority of admitted students have scored in the upper 50% of those taking the GRE general exam.

International students should score at least 550 on the TOEFL (written exam: CBSS, or Computer-Based Score Scale = 213; Internet-based TOEFL = 79-80). Students with TOEFL scores between 475 and 550 may be admitted, but will be required to complete ESL training as specified in the MSU *Graduate Bulletin* (see Graduate Studies web page).

The graduate faculty screens applications and recommends for or against admission based on academic records, exam scores, letters of recommendation, program openings, compatibility with faculty expertise, and availability of funds. Because of the varying expectations of individual faculty, it is advised that potential applicants make contact with an appropriate major professor/thesis advisor prior to applying, to determine academic suitability and research compatibility. Typically, of students who apply to the program without initiating contact with a supporting faculty member in advance, only a small percentage are admitted to graduate studies in the Department.

#### *Provisional admission*

In rare cases, if a student does not meet the minimum admission requirements, an individual faculty member may sponsor the student, if the student's record is close to the minimum requirements and he/she has exceptional academic promise. In such a case, the student will be admitted provisionally as recommended by the Graduate Committee. The provisional student must earn at least a 3.0 GPA while carrying a full load (six hours summer/nine hours fall or spring, exclusive of special problems and thesis research hours) of graduate level coursework during the first semester (if the student is a full-time student). ***Transfer hours or unclassified graduate hours will not fulfill this requirement.*** The graduate committee will review the student's progress toward the end of his/her first semester and decide whether regular admission or dismissal should be recommended; this review will also involve the student's advisory committee, if it has been formed. ***A student will not be retained on provisional status for more than two semesters.***

#### *Conditional Admission*

In some cases, a student can be accepted pending a particular condition, such as completion of a B.S. or M.S. Degree or other conditions such as determined by the faculty. A student accepted on conditional basis may receive an assistantship or fellowship. Completion of the conditionality will be reviewed by

the Graduate Committee and the student's Advisory Committee after the time period specified upon admission to the Program. ***Failure to remedy the condition within a reasonable period of time may serve as grounds for dismissal from the Program.***

### ***Admission to Ph.D. Program***

Students with a B.S. Degree are normally admitted to the M.S. program and not directly to the Ph.D. program. Students who are making exceptional progress in their M.S. research and coursework and who have a goal of pursuing a Ph.D. may elect to apply for the doctoral program. Usually, they will be eligible for admission when they appear to be within 6 months of completion of all M.S. Degree requirements. Any student who has earned or is earning an M.S. at another institution will be ***eligible for admission*** with at least a "B" average on graduate coursework and good progress on the thesis research; ***the student may not enroll here until degree requirements at the other institution are satisfied.*** Movement into a doctoral program prior to completion of M.S. Degree requirements will depend upon recommendations of the Major Professor and the Advisory Committee, with final approval of the Graduate Committee. Only students who have demonstrated independent, high-quality research efforts will be considered for this option.

### ***Undergraduate Requirements***

It is expected that students who will be admitted to our graduate program will have had the basic coursework background required for the B.S. in biological sciences or microbiology at Mississippi State University. The student must have at least 30 semester hours in the area of basic upper division (i.e., sophomore and higher) courses in biological/life sciences (not including computer science). If the student has not taken appropriate coursework, deficiencies will need to be made up during the student's graduate program. The Advisory Committee can specify particular undergraduate deficiencies which the student must make up for undergraduate credit.

## **GENERAL DEGREE REQUIREMENTS**

The general degree requirements are covered in the *Bulletin of the Mississippi State University Graduate School*. By the end of the second semester of residence, the student must file a program of study. ***Failure to meet this deadline will result in loss of financial support from the department.*** The program of study must be formulated in consultation with the Major Professor and the Advisory Committee and must be approved by the Graduate Coordinator. All graduate students are required to take the following two courses: BIO 8013, Scientific Writing for Biological Scientists, and ST 8114, Statistical Methods. These required courses may be waived if the student presents evidence of proficiency in these areas to their Advisory Committee. In addition, doctoral level students are strongly encouraged to take ST 8214, Design and Analysis of Experiments or another advanced statistics course in their particular area of research emphasis.

At least half of the academic credit hours must come from courses numbered 8000 or higher. Some Directed Individual Study courses (BIO 7000 level) may be approved for use in meeting the requirement of courses at the 8000 or 9000 level. Requests for advanced-level credit for BIO 7000 should be approved by the Advisory Committee and submitted to the Graduate Coordinator. When the Advisory Committee and the Graduate Coordinator *disagree* on approval of these requests, the Department Head will have final approval authority. Regardless, no more than six semester hours of graduate credit may be earned in Directed Individual Study (BIO 7000) courses.

Any full-time graduate student must register for and attend BIO 8011 Seminar, every semester in residence except for the final semester. During the final semester in residence, the student is required to give a public seminar on his/her thesis or dissertation (“exit” seminar). This usually will take place very shortly before his/her final exam (thesis or dissertation defense). At this seminar, the majority of the thesis/dissertation research should be presented to both the Advisory Committee and the usual seminar audience. The student will register for BIO 8021 during the semester in which this seminar is given. These student seminars will be given at either the normally scheduled departmental seminar or at designated alternative times. Also, the student is encouraged to volunteer to present his/her work at other occasions to gain the valuable experience of making an oral presentation to a professional audience and also to make presentations at local, regional and national meetings.

It also is required that all graduate students demonstrate sufficient proficiency in the general biological sciences at the level necessary to be competent to teach a freshman level course in a life science to majors. To this end, the Department of Biological Sciences encourages every graduate student obtain some teaching experience, which is normally at least one semester of laboratory instruction.

Students on an assistantship should have a look at the Office of Graduate Studies’

**Graduate Assistant Handbook:** <http://www.msstate.edu/dept/grad/pdf/files/gahandbook.pdf>

## RESEARCH PROPOSAL

A research proposal must be prepared for both M.S. and Ph.D. programs. This proposal serves the purpose of formulating a proper protocol for the research and allows the student's Advisory Committee to evaluate (i.e., accept, expand or reduce) and approve the intended work. ***The student should prepare the proposal as soon as is feasible;*** until the project is approved by the Committee, there are no guarantees that the project will suffice as a proper project. An approved proposal protects the student, allows the Advisory Committee to know what the student is doing, and affords the Committee an opportunity to advise the student.

Although the student is encouraged to informally discuss the proposed research with members, the research proposal must be formally approved at an Advisory Committee meeting where the proposed research is presented and where differences of opinion can be resolved. The student, Major Professor, or any Committee member should call additional Advisory Committee meetings whenever it is deemed necessary. Any ***major*** changes in scope or direction of the research must be approved by the Advisory Committee.

The proposal should be presented to the Advisory committee as early as possible but by the end of the third semester of residency ***at the latest. Failure to meet this deadline will result in loss of financial support from the Department.***

The following is one suggested format to be used in preparing the written research proposal. However, it is strongly encouraged that students prepare their proposal such that they mirror guidelines used by the most relevant federal funding agency. This provides a familiarity with the grant funding process, the funding agency/agencies, and a format more in-line with the broader scientific community.

<b>General components of a research proposal</b>	
<b>Title</b>	Should state clearly and concisely the nature of the proposed research
<b>Introduction</b>	Should state the nature of the problem clearly and specifically, documented with relevant citations from the peer-reviewed scientific literature.
<b>Objectives</b>	Should provide discrete, succinct statement of specific objectives, including hypotheses to be tested.
<b>Research Plan and Methods</b>	Should demonstrate knowledge and competence; should include design and proposed statistical analyses of data.
<b>Preliminary Data</b>	Should be presented clearly and concisely, where available.
<b>Significance of Research</b>	Should provide discussion of expected results, supported by the scientific literature, and justification of research.
<b>Literature Cited</b>	Should be formatted according to convention of the student's sub-discipline within the Biological Sciences.
<b>Suggested funding agencies to consult for proposal format</b>	
<b>National Science Foundation</b>	<a href="http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg">http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg</a>
<b>National Institutes of Health</b>	<a href="http://grants.nih.gov/grants/oer.htm">http://grants.nih.gov/grants/oer.htm</a>
<b>US Department of Agriculture</b>	<a href="http://www.csrees.usda.gov/funding/rfas/nri_rfa.html">http://www.csrees.usda.gov/funding/rfas/nri_rfa.html</a>
<b>Environmental Protection Agency</b>	<a href="http://es.epa.gov/ncer/rfa/">http://es.epa.gov/ncer/rfa/</a>

For the proposal evaluation or any other such meetings, copies of all materials should be supplied to each Committee member *at least two weeks prior to the meeting*.

## MASTER'S OF SCIENCE DEGREE

### General

The M.S. program requires at least 30 hours of graduate level courses: 6 hours of thesis research and at least 24 hours of coursework (including BIO 8011, BIO 8021, BIO 8013, and ST 8114 or approved alternatives). At least 12 of these 24 hours must be at the 8000 level (see General Degree Requirements regarding BIO 7000: Directed Individual Study). A minor is optional and will be declared based upon the recommendations of the Advisory Committee and student career goals. At least 9 credit hours and consent of the minor department constitute a minor.

The M.S. research is designed to give the student experience in the scientific process, and the M.S. thesis is expected to be the result of an original investigation of a concise nature that, ideally, would be submitted for potential publication in a peer-reviewed scientific outlet. The research project will be developed by the student under the direction of the Major Professor. The Advisory Committee must approve the program of study, research proposal, the written thesis and the oral defense.

### Time limit

Consistent with Graduate School policy, the time limit on credits earned that can be accepted toward fulfilling the requirements for an M.S. is six years. A typical time for completion of an M.S. is two or three years. If truly extenuating circumstances prevent meeting the six-year limit, the Graduate School can be petitioned to allow additional time. Such requests for time extensions must have the approval of the Advisory Committee, the Graduate Coordinator, and the Dean of the College, and approval of these requests is not automatic; thus, such requests should be avoided if at all possible. These time limits do not apply to financial support. See *Financial Support* section for that information.

### Advisory Committee

The Advisory Committee is the degree granting unit within the Department, and its responsibilities are to: guide the student in program development, approve the program of study, make recommendations on the research proposal, approve the research proposal, and administer the appropriate written and oral examination. The Advisory Committee may approve more requirements in the student's program (for example, undergraduate courses or foreign language) than the minimum requirements stated in this Handbook. In addition to the Major Professor, the M.S. Committee must have a minimum of two other members, all of whom must be members of the Graduate Faculty. For non-MSU Committee members, a request for appointment to Graduate Faculty must be submitted to the Graduate Studies Office. The Graduate Coordinator is an *ex officio* member of all Advisory Committees; if the Graduate Coordinator cannot attend a committee meeting or oral exam, he/she may assign a substitute to attend.

The majority of Committee members should be from the Department of Biological Sciences; however, this may not be the case in certain circumstances, such as co-directed degree programs. No more than one Committee member may be an Adjunct Professor. Any Committee member from outside the Department should bring some special expertise to the research project which is unavailable within the Department. The composition of the Advisory Committee must be approved by the Graduate Coordinator. For the Master's committee, two of the three members (including the Major Professor) should come from the Dept. of Biological Sciences. See section on Graduate Student Advising for more details on Advisory Committee composition. ***An advisory committee must be appointed by the end of the second semester in residence. Failure to meet this deadline will result in loss of financial support from the department.***

## **Admission to candidacy**

A student admitted into a degree program is not yet a candidate for that degree. For an M.S. Degree, candidacy is awarded if (1) a graduate program of study has been approved by the Advisory Committee, (2) transcripts of all graduate credit taken at MSU and elsewhere are on file with the Graduate School, (3) the student holds a bachelor's degree in an appropriate field, *and* (4) the student has completed at least 12 hours of graduate work with an average grade of "B" (3.0 on a 4.0 scale).

## **Graduate exams – the thesis defense**

A final comprehensive exam (the thesis defense) is required of all M.S. Degree candidates. This exam will be administered by the Advisory Committee after a draft of the thesis has been evaluated by all Committee members. The exam will be oral and will be coordinated by the Major Professor. The oral examination should show: 1) the candidate's thorough familiarity with the literature in the field of major interest; 2) the relation of the special subject to allied subjects; and 3) the level of general knowledge and training, including use of oral and written English.

Since the student will have just presented the research project as a departmental seminar, the need for a formal presentation of the research results at the beginning of the oral examination will be at the discretion of the Advisory Committee. The *properly formatted thesis* must be submitted to the Committee at least two weeks prior to the oral exam. The student also must ensure that the time, date, and location of the research seminar are publicly posted to permit an open and broad audience for the presentation of the student's thesis research. This announcement should be made in coordination with the Graduate Coordinator or appropriate Office Staff member and in conjunction with filing appropriate forms through the Graduate Studies Office two weeks in advance of the examination.

A student must be enrolled at MSU during the semester the exam is administered, must have a 3.0 GPA on all course work after being admitted to the program (i.e., program and non-program courses), and must be within the last six hours or in the terminal semester (per Graduate Council, May 2006) of course work excluding internship/practicum courses (per Graduate Council, September 2004). The program graduate coordinator or student's major professor should request the Examination Results form from the Office of the Graduate School.

One negative vote will not constitute failure for a student on a preliminary/comprehensive examination and/or thesis/dissertation defense. Two negative votes will constitute failure for a student on a preliminary/comprehensive examination and/or thesis/dissertation defense (per Graduate Council, October 2005). A student who fails the exam cannot apply to retake it until four months from the date of the original test. Two failures result in the student being dropped as a Master's Degree candidate.

## **Residency and transfer credit**

Credits toward advanced degrees may be earned in other external programs (e.g., Division of Continuing Education) provided they contribute to a systematic program of study, are approved by the student's graduate committee, and do not exceed one-half of the credits, excluding thesis credits, required for the degree. Graduate credit is not awarded in the correspondence study program.

Transfer credit hours from another university may be accepted toward fulfilling requirements for a Master's Degree at MSU provided they were earned in programs fully accredited by the appropriate regional and national accrediting bodies, provided they contribute to the current program of graduate study, *and* provided they were taken within the six-year time limit for the Master's Degree. Courses in

which grades of “C” or lower were earned or grades of Pass/Fail or S/U are not accepted for transfer. Transfer credit may not be used to satisfy provisional admission requirements. Transfer credit may not constitute more than nine semester hours of course work except for Master’s programs requiring more than 40 hours, in which case transfer credits may constitute up to 30 percent of the total credit hours. Up to one third of the required hours for a minor (nine hours at the master’s level) may be transferred to MSU. Transfer credit from one Master’s Degree program at MSU toward a second MSU Master’s Degree is also limited to a maximum of nine hours. A minimum of 21 semester hours must be earned at the Mississippi State University main campus and/or the Meridian Center. With departmental and college approval a student may transfer up to nine hours of graduate credit for military coursework evaluated by the American Council of Education.

<b>DEADLINES FOR MAINTAINING SATISFACTORY STATUS – M.S. DEGREE</b>		
<b>First Semester</b>	<b>Second Semester</b>	<b>Third Semester</b>
Specify Major Professor	Program of study	Approved research proposal
	Committee request form	

**MASTER’S DEGREE  
Due Dates for Graduate Student Forms  
Office of Graduate Studies**

<b><u>Master’s/Educational Specialist Forms</u></b>	<b><u>Due in the Department</u></b>	<b><u>Due in The Office of Graduate Studies</u></b>
Committee Request Form	First semester of enrollment	Second semester of enrollment
Committee Request Change Form	Upon departmental approval	Upon departmental approval
Program of Study	First semester of enrollment <b>** But see table above</b>	Semester in which student applies for graduation
Change(s) in Graduate Program	Upon committee approval	Semester in which student applies for graduation w/program of study
Transfer Approval Form w/ transcript	Upon committee approval	Semester in which student applies for graduation w/program of study
Announcement of Thesis Defense	Two weeks prior to the scheduled date of the examination	Two weeks prior to the scheduled date of the examination
Report of Comprehensive Examination/Thesis Defense Results	Immediately following examination(s)	By the date given in the Academic Calendar in Graduate Studies Bulletin

The MSU Libraries provide online access to guidelines for properly formatting theses and dissertations. See the Libraries website for more information or go to: <http://library.msstate.edu/thesis/index.asp>

## PH.D. DEGREE

### General

The Ph.D. program normally consists of 60 hours beyond the B.S.: 20 hours of dissertation research, BIO 8011, BIO 8021, BIO 8013, ST 8114, and any other courses as determined in consultation with the Advisory Committee. A minor or minors is/are optional, and will be declared based upon Advisory Committee recommendations and student career goals. Appropriate coursework taken in an M.S. program will be counted toward the Ph.D. as judged by the Advisory Committee. If the student enters a Ph.D. program without an M.S., then a minimum of 24 hours of coursework is required.

The Ph.D. research represents a highly independent and original investigation into which the student has had the major input and which, ideally, would be submitted for potential publication in the peer-reviewed scientific literature. The following must be approved by the Advisory Committee: program of study, the research proposal, the comprehensive exams, the written dissertation and the oral defense.

### Time Limit

After a student begins the Ph.D. program, he/she must complete the program within a period of eight years. All courses included on the program of study must be current at the time of completion of the degree. A typical time period for the doctorate ranges from three to five years, and comments on extensions apply as above. An extension of time form, available on the Graduate School website, can be used to request a one-time, one-year extension. The request must be signed by the major professor and the dean of the college and submitted to the Office of the Graduate School. Approval of these requests is not automatic; thus, such requests should be avoided if at all possible. These time limits do not apply to financial support. See *Financial Support* section for that information.

### Advisory Committee

The Advisory Committee is the degree granting unit within the Department, and its responsibilities are to: guide the student in program development, approve the program of study, make recommendations on the research proposal, approve the research proposal, and administer the appropriate written and oral examination. The Advisory Committee may approve more requirements in the student's program (for example, undergraduate courses or foreign language) than the minimum requirements stated in this Handbook. In addition to the Major Professor, the Ph.D. Committee must have a minimum of four other members. The Graduate Coordinator is an *ex officio* member of all Advisory Committees; if the Graduate Coordinator cannot attend a committee meeting or oral exam, he/she may assign a substitute to attend. The majority of Committee members should be from the Department of Biological Sciences; however, this may not be true in certain circumstances, such as co-directed degree programs. No more than one Committee member may be an Adjunct Professor. Any Committee member from outside the Department should bring some special expertise to the research project which is unavailable within the Department. The composition of the Advisory Committee must be approved by the Graduate Coordinator. For Ph.D. committees, three of the five members (including the Major Professor) must come from the Dept. of Biological Sciences. See section on Graduate Student Advising for more details on Advisory Committee composition. ***An advisory committee must be appointed by the end of the second semester in residence. Failure to meet this deadline will result in loss of financial support from the department.***

### Admission to candidacy

A student admitted into a degree program is not yet a candidate for that degree. A Ph.D. student is

awarded candidacy once: 1) the dissertation topic has been selected and approved, 2) the graduate course work has been satisfactorily completed as deemed appropriate by the Graduate Committee, 3) the research skills requirement(s) have been completed – prior to taking the preliminary examination, if applicable), 4) the final program of study has been officially approved and accepted in the Office of the Graduate School along with any needed changes, and 5) the comprehensive/preliminary examination has been passed. Upon completion of these conditions, the Admission to Candidacy form should be sent to the Office of the Graduate School with the examination results. These requirements should be completed in approximately the order presented; however, the comprehensive exams cannot be taken until the other three conditions have been satisfied.

### **Graduate exams – Comprehensive examination**

After completion of all coursework, or during the last semester of course work, the student will take a written examination from each Advisory Committee member. This written examination will be administered by the Major Professor. A comprehensive oral exam will be taken within ten days after completion of the written exam. The outcome of the exam (written plus oral) will be determined by a simple majority vote of the Advisory Committee members. A student who fails this examination cannot apply to take another until four months have elapsed from the date of the original examination. Two failures on this examination will result in dismissal from the Ph.D. program.

A student must be enrolled at Mississippi State University during the semester in which the examination is administered and must have a 3.0 GPA across all courses attempted for graduate credit after being admitted to the degree program (i.e., program and non-program courses). The request to take the exam must be filed by the student with the Office of the Graduate School at least two weeks prior to the date of the examination. The student's program of study must accompany the announcement of comprehensive/preliminary examination. If required, a change of program of study form should be submitted at this time.

### **Graduate exams – Defense of dissertation**

The dissertation is required of all candidates for the doctorate. The dissertation must show 1) mastery of the techniques of research and 2) a distinct contribution to the field under investigation and study. The student's Advisory Committee must approve the dissertation topic, the outline, and the final submission of the dissertation. Thus, expectations will vary from student to student.

The final oral exam will be a defense of the dissertation and any qualifiers remaining from the comprehensive exam. Since the student will have just presented the research project as a departmental seminar, the need for a formal presentation of the research results at the beginning of the oral examination will be at the discretion of the Advisory Committee. The *properly formatted dissertation* must be submitted to the Advisory Committee at least two weeks prior to the exam defense. The student also must ensure that the time, date, and location of the research seminar are publicly posted to permit an open and broad audience for the presentation of the student's thesis research. This announcement should be made in coordination with the Graduate Coordinator or appropriate Office Staff member and in conjunction with filing appropriate forms through the Graduate Studies Office two weeks in advance of the exam.

One negative vote will not constitute failure for a student on a preliminary/comprehensive examination and/or thesis/dissertation defense. Two negative votes will constitute failure for a student on a preliminary/comprehensive examination and/or thesis/dissertation defense. A student who fails the final examination cannot apply for another until a period of four months has elapsed from the date of the original examination. Two failures on the final examination will result in the student being dropped from further consideration as a doctoral candidate.

### **Graduate exams – Re-take of the exams/defense**

In the case of failure to pass the comprehensive exam of the defense, a schedule for re-taking the exam/defense will be at the discretion of the Major Professor and the Advisory Committee. In compliance with the Graduate School policy, the Ph.D. exam/defense cannot be re-taken sooner than four months after the first attempt.

### **Residency and transfer credit**

There is no specific on-campus residency requirement. However, Ph.D. students will be required to complete one-half of required course work and all dissertation credits from Mississippi State University. Transfer credit hours from another university may be accepted toward fulfilling requirements for a doctoral degree at MSU provided they were earned in programs fully accredited by the appropriate regional and national accrediting bodies, provided they contribute to the current program of graduate study, and provided they were taken within the eight-year time limit for the doctoral degree. One-half of the course work may be transferred and must be approved by the Advisory Committee. Courses in which grades of “C” or lower were earned or grades of Pass/Fail or S/U are not accepted for transfer. One-half of the course work exclusive of dissertation credit hours and all dissertation credit hours must be taken from Mississippi State University. Transfer hours may not be used to satisfy provisional admission requirements. Graduate credit is not awarded in the correspondence study programs. With departmental and college approval a student may transfer up to nine hours of graduate credit for military coursework evaluated by the American Council of Education.

<b>DEADLINES FOR MAINTAINING SATISFACTORY STATUS – PH.D. DEGREE</b>		
<b>First Semester</b>	<b>Second Semester</b>	<b>Third Semester</b>
Specify Major Professor	Program of study	Approved research proposal
	Committee request form	

**PH.D. DEGREE**  
**Due Dates for Graduate Student Forms**  
**Office of Graduate Studies**

<b><u>Doctoral Forms</u></b>	<b><u>Due in the Department</u></b>	<b><u>Due in The Office of Graduate Studies</u></b>
Committee Request Form	First semester of enrollment	Second semester of enrollment
Committee Request Change Form	Upon departmental approval	Upon departmental approval
Program of Study	Second semester of enrollment	Two weeks prior to the preliminary/comprehensive examination(s) accompanied by announcement of preliminary/comprehensive examination (s) and change(s) to program
Change(s) to Graduate Program	Upon committee approval	Two weeks prior to the preliminary/comprehensive examination(s) w/program of study
Transfer Approval Form w/transcript	Upon committee approval	Two weeks prior to the comprehensive/preliminary examination(s) with program of study
Announcement of preliminary/comprehensive examination(s)	To be determined by department	Two weeks prior to the scheduled date of the examination w/program of study
Report of Examination Results	Immediately following examination(s)	Immediately following examinations(s)
Admission To Candidacy	Immediately after the student has passed the preliminary/comprehensive oral examination(s) and dissertation topic has been approved	Immediately after the student has passed the preliminary/comprehensive examination(s) and dissertation topic has been approved
Announcement of dissertation defense	Two weeks prior to scheduled date of defense	Two weeks prior to scheduled date of defense
Report of Dissertation Defense Results	Immediately following defense	Immediately following defense

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## GRADUATE STUDENT ADVISING

### Major Professor

The Major Professor assists the student in choosing members of the Advisory Committee and developing a program of study, provides research space, guides the formulation of a research proposal and the conduct of the research project, and assists in providing resources for the research project. The Major Professor must be an associate or full member of the graduate faculty to advise a M.S. student and a full member to advise a Ph.D. student.

Usually, before arriving on campus, entering graduate students will have contacted a faculty member who has agreed to serve as Major Professor. In cases where a single Major Professor can not be identified prior to the enrollment of a graduate student, the student must identify at least two faculty who both agree to co-advise the student during his/her first semester of graduate studies in Biological Sciences. However, a Major Professor (or co-advisors) **must be** specified before the end of the first semester. ***Failure to meet this deadline will result in loss of financial support from the department.***

### Advisory Committee

The Advisory Committee is the degree granting unit within the Department, and its responsibilities are to: guide the student in program development, approve the program of study, make recommendations on the research proposal, approve the research proposal, and administer the appropriate written and oral examination. The Advisory Committee may approve more requirements in the student's program (for example, undergraduate courses or foreign language) than the minimum requirements stated in this Handbook. In addition to the Major Professor, the M.S. Committee must have a minimum of two other members and the Ph.D. Committee a minimum of four other members. The Graduate Coordinator is an *ex officio* member of all Advisory Committees; if the Graduate Coordinator cannot attend a committee meeting or oral exam, he/she may assign a substitute to attend. The majority of Committee members should be from the Department of Biological Sciences; however, this may not be true in certain circumstances, such as co-directed degree programs. No more than one Committee member may be an Adjunct Professor. Any Committee member from outside the Department should bring some special expertise to the research project which is unavailable within the Department. The composition of the Advisory Committee is approved by the Graduate Coordinator, using the appropriate University form.

***An advisory committee must be appointed by the end of the second semester in residence. Failure to meet this deadline will result in loss of financial support from the department.***

## QUALITY OF WORK

In a manner consistent with Graduate School policy, graduate students must maintain an average of B (3.0 on a 4.0 scale) or higher for all courses after admission to the program. Only grades of C or higher will be accepted for credit. One course of the approved graduate program can be repeated; the two grades will be averaged. All grades earned will be employed in overall GPA calculations. Failure to demonstrate satisfactory progress toward completion of degree requirements, including earning two or more Cs or earning a grade of D or F, may be considered by the Graduate Committee in consultation with the student's advisory committee to be sufficient cause for dismissal from the graduate program.

If the student's average falls below a B (3.0 on a 4.0 scale), he/she will have a two semester grace period in which to improve the GPA, including the semester in which the GPA falls below 3.0. By the end of this grace period, the student must have achieved an overall B average. This B average must be

maintained for the duration of the graduate program or the student will be terminated from the graduate program. During the probationary semester(s), the student must be enrolled in approved program requirements or, if the program has not yet been approved, in courses appropriate for the program. Courses during the probationary period should not include Special Topics courses (BIO 6990 or BIO 8990) directed by Advisory Committee members or Directed Individual Study (BIO 7000) hours. ***If such courses are taken during the probationary period, they will not be used in evaluating academic progress during probationary status.***

Students who have been placed on academic probation should have been off probation for at least one semester prior to the semester in which they graduate.

### APPLICATION FOR DEGREE

See Graduate School Bulletin, available through the Graduate Studies web pages:  
[http://www.msstate.edu/dept/grad/bulletin\\_current.pdf](http://www.msstate.edu/dept/grad/bulletin_current.pdf)

### FINANCIAL SUPPORT

Stipends for the support of graduate study are available in the forms of Research Assistantships and Teaching Assistantships. Graduate School policy dictates that recipients of assistantships of any form be enrolled for at least nine credit hours during the fall and spring terms, and, for 12-month assistants, at least three credit hours for each summer term. Students must be officially accepted by the Graduate School to be eligible for financial support.

***Financial support will be withdrawn following failure to meet any one of the aforementioned deadlines.***

Research Assistantships will be awarded based on the recommendation of the faculty member providing the funding. Teaching Assistantships to entering students will be recommended by the Graduate Committee based on the student's credentials, undergraduate teaching laboratory needs, and sponsorship of the potential Major Professor. First consideration for assistantship support will be given to those students eligible for regular admission.

Teaching Assistantships are awarded to entering students for *no longer than two years for M.S. candidates, three years for Ph.D. candidates holding the M.S. degree and four years for Ph.D. candidates without an M.S.* A request for additional support can be made to the Graduate Committee, who will make a recommendation to the Department Head. Substantial written evidence for an extension must be provided by the student and the Major Professor. A student must be making satisfactory progress toward completion of the degree to retain financial support. Annual evaluations of progress will be made by the Graduate Coordinator with respect to academic and research progress.

In general, the duties of a Teaching Assistant will include teaching laboratory sections under the immediate supervision of a faculty member responsible for a given course and under the broader supervision of the departmental Graduate Coordinator and Department Head. The teaching done by Graduate Assistants is an important part of the function of the department. When an individual accepts the responsibility of instruction, he/she is expected to perform in a professional and responsible manner. Every attempt will be made to match the Teaching Assistant to an appropriate laboratory with respect of his or her major interest, but this will not always be possible. The Teaching Assistant is expected to adequately prepare himself/herself for all assigned teaching duties.

Teaching Assistantships are not awarded to international students until they have passed the University's English proficiency screening. This screening is conducted in two Teaching Assistant workshops during Fall semester each year – the International TA Workshop and the General TA Workshop. Although the General TA Workshop is conducted in both Fall and Spring semesters, no International TA Workshop is conducted during Spring. International students who begin their studies in Spring semester must pass the General TA Workshop and enroll in an ESL course offered through Academic Outreach and Continuing Education (at no cost to the Department) in order to be eligible for a waiver of the standard workshop requirements. Students who do not pass either of the TA workshops will be ineligible for Teaching Assistance support until such time that they successfully complete the required training.

***All students and prospective Major Professors should realize that Departmental Teaching Assistantship support will not be provided to students who do not satisfy the training criteria outlined above.***

As stated previously, the graduate student must maintain an average of B (3.0) or higher for all courses after admission to the program. Failure to demonstrate satisfactory progress toward completion of degree requirements, including earning two or more Cs or earning a grade of D or F, may be considered by the Graduate Committee in consultation with the student's advisory committee to be sufficient cause for dismissal from the graduate program. If the student's GPA falls below 3.0, he/she will have a two-semester grace period in which to retain an assistantship, including the semester in which the GPA fell below 3.0. The student may retain an assistantship during this second probationary semester also. During the probationary semester(s), the student must be enrolled in approved program requirements or, if the program has not yet been approved, in courses appropriate for the program. Courses during the probationary period should not include Special Topics courses (BIO 6990 or BIO 8990) directed by Advisory Committee members or Directed Individual Study (BIO 7000) hours. ***If such courses are taken during the probationary period, they will not be used in evaluating academic progress during probationary status.***

By the end of this grace period, the student must have achieved an overall 3.0 GPA. Following such a probationary period, the 3.0 GPA must be maintained for the duration of the graduate program, or the student will be terminated from the graduate program.

#### **APPROVAL FORMS**

The Office of the Graduate School maintains electronic copies of all necessary forms on its web pages. These may be accessed through: <http://www.msstate.edu/dept/grad/forms.htm>

#### **STUDENT GRIEVANCES**

The graduate student-major professor relationship can be a tenuous one, and cases do develop in which the integrity of the graduate training may be compromised in one of any innumerable ways. In cases where a situation arises which gives reason for concern regarding the integrity of the student training and advising, the student must be provided a route for filing a grievance or requesting intervention.

In such cases, the student may file a complaint with the Graduate Committee against the offending party/parties. This complaint will first be heard in front of the Graduate Committee. When the Graduate Committee determines that the grievance merits further consideration, the major professor will be afforded an opportunity to speak in response to the complaints. In all instances, information supporting such allegations should be brought to the Graduate Committee. This information could include laboratory notebooks, electronic correspondence, or other such documents that support the student's allegations. After hearing from both parties, the Graduate Committee will report its findings to the Department Head.