

**DEPARTMENT OF
BOTANY AND MICROBIOLOGY**

THE UNIVERSITY OF OKLAHOMA

GRADUATE STUDENT MANUAL

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This manual incorporates various advisories, information items, and policy statements relevant to Botany and Microbiology graduate students. This should not be considered a complete or final listing of pertinent items but is compiled to facilitate acclimatization of new students and to serve as a source of useful information during their tenure. **The information listed herein reflects Department policy and is subject to change.**

The Procedures and Policies of the Graduate College and the policies of the Department of Botany and Microbiology and other University units remain the final official statements under which graduate work is pursued. Graduate students are expected to be familiar with pertinent portions of the Graduate Bulletin and the Graduate College website <http://gradweb.ou.edu/>.

I. REQUIREMENTS FOR M.S. AND M.N.S. DEGREES

One of the first questions that might be raised by a new graduate student is: "What do I have to do to get the degree?" The answer is that each program is an individual matter between the student, with his or her own specific goals, and the advisory committee representing the Department and the Graduate College. It requires the successful completion of pertinent course work and research leading to a successful defense of a Master's thesis. It is the expectation of the Department that the student's research be published in the leading archival, peer-reviewed journals in the respective areas. Certain *general statements* can be made, and the following paragraphs outline those general requirements.

A. Summary of Requirements for the M.S.

1. The M.S. degree requires 30 hours of graduate level coursework.
 - (a) Six hours (maximum) may be counted for the thesis research (5980). Following initial enrollment in 5980, which must be for two hours, each student must maintain continuous enrollment during each regular semester (not summer sessions) in at least two hours of 5980 until all requirements for the degree are completed or the degree candidacy is discontinued. During the summer, if thesis work is being done or if the student is appointed as a research or teaching assistant, the student must also enroll in 5980.
 - (b) Two of the 30 hours credit must consist of Seminar in Botany or Microbiology (5971), respectively, and attend seminar every semester. **All graduate students must attend seminar regardless of whether or not they are receiving credit for the course.** Attendance will be taken for all students (whether or not receiving credit) and those with poor attendance will have additional seminar requirements to complete.
 - (c) At least 4 hours must be taken in an "outside" department or area. Botany graduate students may use courses in Microbiology, and vice versa, as their outside hours, as long as these courses are not cross-listed between Botany and Microbiology.
 - (d) A maximum of 8 hours transfer credit may be applied to the Masters degree.
 - (e) Courses taken under the pass-fail or audit option cannot be used to fulfill deficiencies, and pass-fail or audit courses do not carry graduate credit.
 - (f) A maximum of 12 hours of 3000 or 4000 level courses (post-baccalaureate) may be counted toward degree programs with a maximum of nine hours of 4000 courses from the Department of Botany and Microbiology. Our own

departmental 3000 level courses cannot be counted towards graduate programs in Botany and Microbiology.

- (g) Enrollment is generally limited to no more than 16 hours per semester or 9 hours per summer session. A graduate assistant, research assistant, or teaching assistant normally may carry no more than 12 hours per semester (a maximum of 10 is recommended; more than 12 requires Dean's permission). Graduate research or teaching assistants **must** enroll in a minimum of six hours in the fall and spring semesters.
2. The student's program of graduate study will be determined by a committee appointed by the Graduate Liaison, currently the Chairman of the Department.
 - (a) The committee will consist of at least three faculty members, one of whom will be from the student's major area of interest (the major professor).
 - (b) The committee will be guided by the student's statement of goals and by discussions with the student's major advisor as well as other faculty members.
 - (c) The study plan is filed with the student's records.
 3. All graduate student records are filed in the Departmental office. However, the major professor, when appointed, will be the major advisor and will serve as chair of the student's graduate committee.

The Department must conduct an annual review and evaluation of our graduate students' progress in meeting degree requirements. The review will be conducted by the department's Admission and Retention committee in consultation with the student's thesis advisor and committee members. Unless receiving prior written approval of the graduate dean, members of the graduate faculty of the Department shall conduct this review. All aspects of the student's performance will be evaluated, including but not limited to progress made in completing course work, the comprehensive examination, research/creative activity, and writing the thesis or dissertation. The review may also encompass the student's broader scholarly capabilities and professional development as well as effectiveness as a research or teaching assistant.

Each student will be notified by letter of the student's progress and performance. If there are deficient areas, the Department will specify what the student should do to receive a satisfactory evaluation. In the case of unsatisfactory progress or performance, the Department is responsible for monitoring the student's efforts and shall conduct a second review at the end of the next semester or

designated period. The Graduate College and the student will be notified by letter of the results of the second review. Based on the second review and the Department's recommendation, the Graduate College will either remove the student from probation, deny the student further enrollment, or continue the student on probation for an additional period. A student who receives an unsatisfactory evaluation for the third time will be denied further enrollment.

B. Requirements for Specific Programs

In addition to the general requirements of the Graduate College and the Department, the following requirements must be met for the M.S. degree.

1. Microbiology

- (a) The student must present undergraduate credit in at least 12 hours of Microbiology plus the following courses or their equivalents: Physics 2414 and 2424; Chemistry 1315, 1415, , 3053, 3153, and 3152; Math 1823.
- (b) An average of B or better must be maintained in all courses taken for major credit.
- (c) In all cases, satisfactory completion of a thesis is required.
- (d) Before graduation, an oral examination will be given to test the student's mastery of his/her thesis topic and his/her comprehensive knowledge of Microbiology.

2. Botany

- (a) A student must present undergraduate credit in general Botany or equivalent plus 20 additional hours of Biology, and chemistry courses through organic chemistry.
- (b) An average of B or better must be maintained in all courses taken for major credit.
- (c) In all cases, satisfactory completion of a thesis is required.
- (d) Before graduation, an oral examination will be given to test the student's mastery of his/her thesis and of subject matter in three of the following areas: Ecology, Genetics, Structural Botany, Physiology, and Systematics.

C. Check List for M.S. Program

- _____ 1. M.S. Advisory Conference. To be held as soon as a major interest area can be chosen, but in no case later than the end of the second semester in residence.
- _____ 2. No later than the semester in which you plan to start your thesis, select a thesis topic in conjunction with your advisor. Obtain a *Thesis Topic Card* from the Graduate College Office (Room 100, Robertson Hall), complete the card, and have it signed by all members of your thesis committee (the members of your committee must be members of the Graduate Faculty). The Thesis Topic Card must be returned to the Graduate College Office for permanent record. If a change in thesis title becomes necessary as research progresses, a new Thesis Title Card must be processed.
- _____ 3. Following the *initial* enrollment in 5980 (Research for Master's Thesis), which must be for at least two hours, each graduate student must maintain continuous enrollment on the home campus at the University of Oklahoma in at least **two** hours of 5980 during each regular semester until requirements for the degree are completed or candidacy is discontinued. Enrollment in 5980 during the summer session is not required unless: (1) the degree is conferred in the summer session; (2) the student is appointed as a graduate research or teaching assistant; or (3) work is being done on the thesis. (See the Graduate College Bulletin--Special Requirements for Enrolling in Research For Master's Thesis--for further information.)
- _____ 4. No later than the end of Advance Registration for the last semester of the program, file an *Admission to Candidacy Form* in the Graduate College Office (Room 100, Robertson Hall).
- _____ 5. The candidate must also pay the graduation fee in the Bursar's Office (1st floor, Buchanan Hall). The fee payment card and other forms necessary for filing for graduation may be obtained in the Graduate College Office. (Please check the Graduate College web-page for deadlines.)
- _____ 6. An *Authority for Final Examination* is issued when you present a reading copy of your Master's thesis to the Dean of the Graduate College for review. The thesis must be presented at least ten days before the beginning of the scheduled final examination period (five days in the summer). The beginning date will be indicated in the front of the *Class Schedule Bulletin* for each semester.

The student must be aware of all pertinent deadlines and is responsible for allowing every member of the examining committee ample time to read the thesis before the examination.

Revisions of the thesis may be required by the examining committee before the Final Examination. Within *72 hours* after the Final Examination is held, the *Authority for the Final Examination Form* must be returned to the Graduate College Office with the results and signatures of *all* committee members.

Only **one** attempt is afforded the candidate in defending the thesis. In addition to returning the results of the final examination, the student must hand-deliver, three unbound and signed copies of the thesis to the Graduate College within 60 calendar days following a successful defense.

- _____7. Upon receipt of the above and a check of the student's records, a *Thesis Receipt Card* may be issued to the student for depositing the thesis in the library (assuming all other deadlines and course requirements have been met). Once the student has been cleared by the Graduate College, the three final copies of the thesis should be delivered to the Acquisitions Department of Bizzell Memorial Library. After checking the thesis for deposit, a representative of the Library will sign the *Thesis Receipt Card*, which the student then returns to the Graduate College office.

D. Summary Requirements for the M.N.S.

1. Requirements for Admission

To be admitted to the M.N.S. degree program, the applicant must hold a valid secondary school science teaching certificate. In addition, the applicant must have completed fifty semester hours of science or hold a degree in science.

2. Curricula

Two specific curricula are available; one curriculum emphasizes academic work in science and science education and research in the latter field, while the second curriculum emphasizes academic work in the sciences. The distribution of academic credit in the two curricula follows:

Curriculum One—M.N.S. Emphasizing Science Education

History of Science	3 hrs.
Science	17 hrs.
EDSC 5513, Teaching Science in the Secondary School	3 hrs.
Cognitive Development Theory	3 hrs.
EDSC 5980, Research for Master's Thesis	<u>4 hrs.</u>
OTAL CREDIT HOURS	30 hrs.

Curriculum Two—M.N.S. Emphasizing Science

Major science	15 hrs.
Minor Science	8 hrs.
History of Science	3 hrs.
EDSC 5513*, Teaching Science in the Secondary School	3 hrs.
Cognitive Development Theory*	<u>3 hrs.</u>
TOTAL CREDIT HOURS	32 hrs.

*Optional

Each M.N.S. student will select a committee to assist in planning and directing the program. Each committee will have a chairperson from the student's major area and two additional members. The major area will be one of the sciences or science education.

The M.N.S. degree requires a comprehensive examination. When the degree is granted in science education, the oral defense of the thesis fulfills that examination requirement. When the student follows Curriculum Two, the examination may be written or oral. All examinations are conducted by the student's committee.

E. Check List for M.N.S. Program

- _____ 1. Advisory Conference with Graduate Advisor. To be held before enrollment in program.
- _____ 2. Selection of Topic for Research Paper (for Curriculum One). This is largely an individual matter, but the suitability of the topic should be verified with the Graduate Advisor at least six months before completion of the paper is anticipated.
- _____ 3. Admission to Candidacy. Apply using the form provided by the Graduate College no later than the end of the second week of the last semester, not before enrollment in the final courses of the program, and at least one week before the exam.
- _____ 4. Comprehensive Written or Oral Examination. Approximately six weeks before the completion of the program (four weeks in summer) a comprehensive (written or oral) examination will be given by the advisory committee. The candidate will register his/her intention to take this examination during enrollment of any semester. He/she must have completed at least 22 semester hours of the M.N.S. program before the examination is taken.
- _____ 5. The candidate must also pay the graduation fee in the Bursar's Office (1st floor, Buchanan Hall). The fee payment card and other forms necessary for filing for graduation may be obtained in the Graduate College Office.

II. REQUIREMENTS FOR THE PH.D. DEGREE

Below are listed major requirements for the Ph.D. degree, which should be completed by the student with the advice of his/her major professor, or the Departmental chairman at the times specified. This is not intended to be a complete outline of the graduate program but rather a reminder of essential steps to be taken in the course of the program. The candidate should familiarize himself/herself with the requirements in the Graduate College Bulletin as specified under: (1) Requirements for Full Graduate Standing; (2) General Requirements for the Degree of Doctor of Philosophy; and (3) Prerequisites for Full Graduate Standing (Departmental). In order to obtain a Ph. D. degree, the student must successfully complete pertinent course work, pass the general examination, and submit and successfully defend the Ph. D. dissertation. It is the expectation of the Department that the student's research be published in the leading archival, peer-reviewed journals in the respective areas.

A. Specific requirements for the Ph.D. degree

1. Advisory Conference and establishment of the Dissertation Committee. Not later than eight weeks after his/her initial enrollment in the doctoral program, the student will make an appointment with his/her advisor (major professor) to discuss the appointment of an Advisory/Dissertation Committee. An advisory committee conference must be held with this committee as soon as a major interest area is chosen, but in no case later than the end of the second semester in residence.

The Dissertation Committee must consist of at least five graduate faculty members, including at least one from outside the Department but inside the University of Oklahoma, Norman. Faculty members outside the University may serve on the Committee, but must obtain adjunct status with the Department and cannot function as the Committee member outside the Department.

The function of the Dissertation Committee is to plan the program of the student (in consultation with the student), to oversee the student dissertation research progress, and to administer his/her general examination and the final examination in defense of the dissertation. The report of the Advisory Conference will include the coursework that is required and recommended for the Ph. D. degree.

After the Advisory Conference is held, the student must file a completed Report of the Advisory Conference. The report must be signed by the Dissertation Committee and Chairperson of the Department. If any changes in the Report of Advisory Conference or in the membership of the permanent Dissertation Committee become necessary, a *Request for Change in Doctoral Advisory Conference Report* must be filed with and

approved by the Graduate College Dean. The request must also be approved by all members of the student's Dissertation Committee. If a change in the membership of the Doctoral Committee is contemplated, the student must secure the approval of all original committee members and submit this request for approval by the Graduate College. No change in the membership of the Doctoral Committee is permitted within thirty days of the dissertation defense.

2. Annual Review. The same rules apply as for the M.S. Candidate (refer to section 3 page 5).
3. Credit Requirements. The student must complete at least 90 semester hours of graduate level work beyond the Bachelor's degree.
4. Transfer of Master's Degree Credit toward the Doctoral Degree. Regardless of the age of the hours, the total number of hours applied or transferred may not exceed 49 percent (44 credit hours) of the hours required for the doctoral degree.
5. Courses taken under the pass-fail or audit option cannot be used to fulfill deficiencies and pass-fail and audit courses do not carry graduate credit.
6. The student must be in residence at the University of Oklahoma at least two full semesters (excluding summer sessions) and be engaged in coursework or research activities prescribed by the Department.
7. A graduate student without a M.S. degree has the option of enrolling in the Ph.D. program with the approval of the research advisor and the Graduate College.
8. Doctoral students must present three hours credit in Botany 5971 or Microbiology 5971, respectively, and attend seminar every semester. **All graduate students must attend seminar regardless of whether or not they are receiving credit for the course.** Attendance will be taken for all students (whether or not receiving credit) and those with poor attendance will have additional seminar requirements to complete.

B. Specific Programs Requirements

1. **Microbiology**
 - (a) A minimum of 30 of the last 60 semester hours must be taken in Dissertation Research (6980). After initial enrollment in 6980 for at least two credit hours, continuous enrollment in at least two credits per semester is required until all requirements are completed for the Ph.D. degree.
 - (b) Every Microbiology student is required to attend and participate in graduate seminar (MBIO 5971). Ph.D. students must enroll for three hours of credit in MBIO 5971, **but must attend seminar even when not enrolled.**

- (c) Ph.D. students will usually be recommended to take 12 hours of graduate level credit in courses outside of the Department.
- (d) It is recommended that every graduate student obtain experience in teaching.
- (e) Tools of Research. Every doctoral Microbiology student must take or present credit from an accredited college two courses that enhance the written and oral communication skills such as technical writing, foreign language, communication, etc., and/or the quantitative skills such as computer programming or statistics.
- (f) General Examination in Microbiology. The dissertation committee will administer the general examination. The general examination program has two components:
 - 1) The written examination will be the submission of a written research proposal.
 - 2) The oral examination will be successful oral defense of the proposal and research summary as well as the satisfactory demonstration of knowledge in Microbiology.

The student is expected to take the general examination the semester after he/she completes the required courses as delineated in the Report of the Advisory Conference.

Written Examination. The student must submit to all Committee members three preproposals that he/she feels are suitable subjects to form the basis of a research proposal, one of which may be related to his/her dissertation research. These preproposals should be no more than one page in length (excluding references) and should contain a brief summary of the literature, the hypothesis to be tested, and a general plan of work.

Within 1-2 weeks after submission of pre-proposal topics, the student will meet with his/her Dissertation Committee and an acceptable topic will be chosen from the three. If none of the topics are acceptable, then the student will submit three other topics within one month. If none of these latter topics are acceptable, this will be considered a failure, and the student will be dismissed from the Ph.D. program.

Within two months of acceptance of a research topic, the student must prepare a written proposal modeled after that required by NIH/NSF and submit typed drafts to each member of his/her committee. The committee will review the research proposal according to the following criteria: (1) adequate review of the literature delineating the

relation of the proposed work to the state-of-knowledge in the field; (2) clearly defined objectives (specific aims); (3) significance of the proposed work; (4) general plan of work and alternative approaches to the problem; and (5) the ability of the student to apply his/her knowledge of Microbiology and related areas to a particular problem in Microbiology. The student would be well advised to consult with his/her major advisor and the committee members during the preparation of the research proposal. However, committee members will not serve as editor nor make any extensive changes or corrections of the proposal prior to its submission. Within two weeks of receipt of the written proposal, the committee will convene and determine if these materials are satisfactory, i.e., whether the proposal is of sufficient quality that it can be orally defended. All committee members must agree that the proposal is satisfactory for the student to pass this portion of the general exam. Any minor weaknesses in the proposal will be discussed with the student at this time.

If the committee decides that these materials are unsatisfactory, the major advisor will summarize in writing the committee's objections and convey this information to the student. The committee will decide whether the student will revise the proposal or submit a new proposal. The student will have two months to submit these materials to the committee. Should the second submission be unsatisfactory, the student will be dismissed from the Ph.D. program.

Oral Examination: A meeting between the student and the committee will be arranged within one month of the approval of the proposal, and these materials will be defended. The oral defense is based on both the written research proposal and the student's dissertation research to date. The oral defense of the research proposal and dissertation research summary should consist of at least a 30-minute oral presentation of the proposal, followed by defense of the research proposal and then a brief presentation of the research summary and its defense, and also by demonstration of knowledge in Microbiology through questioning from the members of the committee. The oral defense will be judged either satisfactory or unsatisfactory. In the latter event, the student will have one additional opportunity for a repeat defense of the research proposal and research summary.

Should this second oral defense also be unsatisfactory, the student will be dismissed from the Ph.D. program.

In order to successfully defend the proposal, the student will need a solid knowledge of Microbiology. The student is also expected to provide and defend an oral summary of his/her research project as well as to demonstrate a solid knowledge of

Microbiology. The areas of knowledge covered on the general examination may include such fields as: (1) General Microbiology, including mycology; (2) Pathogenic Microbiology, including immunology; (3) Molecular biology, including microbial genetics; 4) Microbial physiology; 5) an outside area (e.g., Biochemistry, Civil Engineering, or Zoology). Students that have been dismissed from the Ph.D. program may receive a M.S. degree only after fulfilling all the requirements for a M.S. degree.

2. Botany

- (a) 30 to 45 of the 90 hours usually consist of the research course BOT 6980, and approximately one-half of the last 60 hours should be in research. After initial enrollment in BOT 6980 for two credit hours, continuous enrollment in two hours per semester is required until all requirements for the Ph.D. degree are completed.
- (b) Each student, as part of his/her training, is recommended to instruct or assist in either a lecture or laboratory, or serve in classroom preparation for a minimum of one semester. The student's performance in the classroom will be evaluated by the instructor in charge of the course.
- (c) Each student must have either a minor or a related field with a minimum of 6 hours.
- (d) Every Botany Ph.D. student is required to attend and participate in graduate seminar (BOT 5971). Ph.D. students must enroll for three hours of credit in BOT 5971, **but must attend seminar every semester, regardless of enrollment status.**
- (e) The examination for candidacy will be administered by the examining committee made up of the student's major professor who chairs the general examination, committee members from within the department, and a representative from the outside area. The General Examination has two components:
 - Submission of a written research proposal
 - Comprehensive examination

Research Proposal. Approximately one week before the oral examination, the student will submit to all Committee members a proposal related to his or her dissertation research. The research proposal should be developed under the supervision of the student's major professor and according to the formatting guidelines and length requirements established by the examining committee. The research proposal should include: 1) an introduction and review of the literature pertaining to the problem(s) under investigation and methods to be utilized; 2) specific research objectives including

hypotheses to be tested, 3) significance and rationale, and 4) a general plan of work and a timetable.

Comprehensive examination. A formal review of the research proposal will constitute the initial phase of the examination. The second phase will consist of an oral examination that should assess the student's knowledge of relevant areas of plant biology. Committee members will determine if a written component of the comprehensive examination is required.

3. Ecology and Evolutionary Biology (PH.D.)

In addition to the requirements for either a Botany or a Microbiology Ph.D. degree, students seeking a Ph.D. in EEB must take the seminar in Botany or Microbiology, as well as BOT or MBIO 5453 (Advanced Ecology and Evolutionary Biology), and BOT or MBIO 5471 (Seminar in Ecology and Evolutionary Biology).

C. Checklist for Ph.D. in either Botany or Microbiology

_____1. *Application for Advisory Conference.* Not later than eight weeks after his/her initial enrollment in the doctoral program, the student should make an appointment with his/her major professor. The student will then arrange with the Dissertation Committee for an advisory conference. After the Advisory Conference is held, the student must file a completed Report of the Advisory Conference. The report must be signed by the Dissertation Committee and the Graduate Liaison, currently the Chairperson of the Department.

If any changes in the Report of Advisory Conference or in the membership of the permanent Doctoral Committee become necessary, a *Request for Change in Doctoral Advisory Conference Report* must be filed with and approved by the Graduate College Dean. The request must also be approved by all members of the committee. If a change in the membership of the Doctoral Committee is contemplated, the student must secure the approval of all original Dissertation Committee members. No change in the membership of the Dissertation Committee is permitted within thirty days of the dissertation defense.

_____2. *Advisory Conference.* The Chairman of the Dissertation Committee will prepare a report of the Advisory Conference on a form provided by the Graduate Office. This will include the requirements to be met for the degree as specified by the Committee during the conference, including any specific skills or tools that are to be a part of the program. Copies of the report will be given to the Graduate College Dean, the student, each member of the committee, and the Departmental Office. The Advisory Conference must be held with the Dissertation Committee as soon as a major interest area is chosen, but in no case later than the end of the second semester in residence.

_____3. *Application for general examination.* Each student is expected to take his/her general examination within the first two months of the semester following completion of his/her required course work as determined by the Advisory Conference Report. Before making application, the student also must have made up all deficiencies. When coursework has been completed, the prospective candidate must file with the Graduate College a completed *Application for General Examination for the Doctor's Degree* form. All committee members must sign the form. Applications are available in the Graduate College. The student must apply for the examination at least two weeks before it is to be held. The examination should not be scheduled

during final examination periods or when the Doctoral Committee cannot be assembled.

After the examination is authorized by the Graduate College Dean, the student should arrange a time and place for the examination with his/her Doctoral Committee. All Ph.D. students in Botany and Microbiology will be examined over the areas of their respective disciplines listed previously in this manual. The Dissertation Committee will administer the examination for all Ph.D. students in their respective disciplines.

- _____4. *Examinations.* Within one semester (excluding summers) after completion of the required coursework (excluding seminars), the student must complete all examinations required by either the Botany or Microbiology program.
- _____5. *Admission to Candidacy.* After the general examination is completed, the major professor will prepare a report indicating whether the candidate has passed or failed and what further work he/she must do. If he/she has passed, the Graduate Council will admit him/her to candidacy for the Doctor's degree. If all or any portion of the general examination is failed, a report must be submitted to the Graduate College Dean indicating a failure on the examination. At the discretion of the Committee, the student may seek authority from the Graduate College to repeat those portions of the examination failed the first time. If a student fails any portion of the general examination on the second attempt, he/she will be terminated from the doctoral program. No portion of the examination may be taken the third time. If a student's performance is marginal, but not failing, and the examining committee wishes the student to do further readings, coursework, investigations, etc. in a set time period, the results of the examination can be held in abeyance with the approval of the Graduate College Dean. At the end of the time limit (usually no more than one semester) the committee must file the report with the Graduate College.

Any report received in the Graduate College without a unanimous vote will be investigated by the Graduate College Dean. The Dean may choose to confer with the dissenting member(s), with the committee chair, or with the entire committee. The course of action taken will be dictated by each individual case.

The Graduate College provides authorization for a student to sit for the general examination and must receive a report on the outcome of each general examination. If the examination was not held, a report indicating the reasons why it was postponed must be submitted.

_____6. *Doctoral Seminar.* Each Candidate for the Doctor of Philosophy degree in Botany or Microbiology is required to present a seminar based on his/her dissertation research. This shall be open to the public, and it shall be presented before the final oral examination. Since the candidate has a right to expect comments that will be helpful in writing the dissertation, time will be allowed for discussion immediately following the presentation.

_____7. *Reading Copy of Dissertation.* Deadlines for submission of reading copies are printed in the front of the class schedule for each semester or summer session and listed on the Graduate College website. The doctoral candidate should prepare and distribute reading copies of the dissertation to each doctoral committee member. The reading copy should be in an acceptable dissertation format and must include all figures and tables, numbered pages, and a complete bibliography. It should not contain grammatical or spelling errors. Printed instructions for the preparation of the dissertation are available in the Graduate College. When the copy has received preliminary approval of the major professor, it should be submitted to the Graduate College along with an abstract of not more than 350 words.

At least five members of the Dissertation Advisory committee must read and determine whether the dissertation demonstrates the student's ability to conduct original research and makes a significant contribution to the student's discipline. They may accept or reject it. If they reject it, the student will be given another opportunity to submit an acceptable dissertation to the committee. If they accept it, they may require changes and corrections. When the dissertation is acceptable and a degree check indicates that the student has completed all course work with acceptable grades, the student may schedule the final oral examination.

_____8. *Final Oral Examination.* The candidate may apply for the final oral examination on a form provided by the Graduate Office as soon as he/she can present the corrected draft of his/her dissertation. The initial portion of the final oral examination is open to the public, after which the examination enters into executive session comprising the student and the doctoral examining committee.

_____9. *Final Dissertation Advisory Committee Report.* At least four members of the Doctoral Committee must be present to conduct the examination, one of which must be the outside member of the committee. After the oral examination and within 72 hours of the examination the committee will report its decision to the Graduate Dean on a form provided by the Graduate Office.

- ____ 10. *Post-examination activities.* Following successful defense of the dissertation, the candidate may pick up the *Survey of Earned Doctorates* form and the *Dissertation Topic Card* in the Graduate College office. Three final copies of the dissertation must be delivered to the Graduate College. If all is in order, the copies of the *Dissertation and Thesis Receipt card*, properly signed, the *Survey of Earned Doctorates form* and the completed *Dissertation Topic Card* are deposited in the Graduate College. Then the candidate will be cleared for graduation.
- ____ 11. *Graduation.* Students must apply for the appropriate degree early in the semester in which they propose to graduate. A form indicating the student's name exactly as it is to appear on the diploma and giving the exact degree for which the student has been admitted to candidacy must be filed with the Registrar. Similarly, all graduation fees must be paid by the date printed in the Class Schedule.
- ____ 12. *Responsibilities.* **It is the responsibility of the student to know and follow all rules, guidelines, and deadlines of the Department of Botany and Microbiology and of the Graduate College.** Failure to satisfactorily complete any of the following four requirements will result in the student being dismissed from the Ph.D. program.
- (1) Have an advisory committee conference
 - (2) Complete the required courses with satisfactory grades
 - (3) Pass the general examination
 - (4) Successfully complete and defend research dissertation

III. CONTINUED ENROLLMENT

A student who has been placed on probation must achieve a "B" average in all graduate coursework attempted, or he/she will be denied further enrollment. Any student not on probation who fails to maintain an overall "B" average in his/her graduate work will be placed on probation. If he/she fails to bring the grade point average up to 3.0 after completing two semesters and an additional summer of further enrollment, he/she will be denied subsequent enrollment. Retention committees from Botany and Microbiology will review each student's progress each year and recommend continuation or withdrawal from the graduate program.

IV. FACILITY PRIVILEGES AND RESPONSIBILITIES

A. Library

Most of the volumes in the Bizzell library are on open shelves, available to students and faculty. Graduate students have certain privileges not enjoyed by undergraduates, but graduate students are subject to fines.

B. Equipment and Supplies

Materials that are routinely stocked in the stockroom may be withdrawn by the student with permission from the major professor. These materials must be signed out properly and charged to the proper account. All office supplies needed by graduate assistants in the execution of departmental business will be furnished. Check with the Departmental secretaries. No supplies will be furnished for personal business and no faxes can be sent or copies made for personal use.

C. Microscopes

Microscopes will be checked out to individual students only with the approval of a faculty member who is supervising their study. This approval must be in the form of a written memo to the Chairman with a copy to the stockroom.

D. Responsible use of Facilities and Equipment

Use of facilities such as the Noble EM lab, plant growth facilities and Botany Greenhouses, and the Bebb Herbarium, as well as equipment such as refrigerators, ovens, incubators, centrifuges, balances, spectrophotometers, etc., located in various laboratories are contingent upon approval of the faculty member in charge of the respective facility or item. It is the responsibility of the Graduate Student to follow all relevant rules and regulations that apply to equipment and facility use. **All graduate students are expected to fulfill necessary safety training. Please consult your major advisor to determine which training sessions are necessary for you.**

E. Keys

Every student with full graduate standing who is currently enrolled in the Department may be authorized a key to the outside door of the building and to the room in which he/she is assigned a desk space. Written authorization for issuance of keys is obtained from the Chairman and taken to the Physical Plant Department where they may be obtained. All doors, both inside and outside should be kept locked after normal hours of use. Keys must be returned to the Department when the student completes his/her degree or is terminated from the graduate program.

F. Mail Boxes

The student's mailbox in the Main office should be checked daily for general notices, mail, notes from staff members, etc. The large Bulletin Board outside the Main Office usually carries announcements of fellowships and grants, information relating to graduate study at various institutions, announcements of summer stations positions available to majors, etc. In connection with fellowships and grants, the Department Office maintains a file concerning opportunities for such support. This information is available to you.

G. E-Mail

Graduate students should ensure that e-mails to their OU address are forwarded to their preferred mailbox (easily done at <http://infoserv.ou.edu/it/helpdesk/index.cfm>), and they should check their e-mail regularly. The Graduate College will use the university assigned e-mail address to contact you on all matters.

H. Student Health Insurance

To be eligible for the Student Health Plan, you must meet the following enrollment requirements:

- Must be enrolled in at least 6 hours during the fall or spring semesters.
- Must be enrolled in at least 3 hours if you are enrolling in summer only coverage.
- If you are in your last semester before thesis or dissertation and you need fewer than six hours, you may continue to have coverage. (You have this option only once during your attendance at OU.)

For more information, consult the OU Student Health Insurance web-site at <http://hr.ou.edu/studenthealth/default.asp>, or contact the OU Human Resource Benefits Office at 405/325-2961.

V. GRADUATE ASSISTANTS

A. Duties

Each assistant is expected to spend an average of 20 hours per week working for the Department. This work will consist primarily of:

1. Assisting classes to which he/she is assigned. Assistants should attend lectures and/or other relevant components of the courses in which they are assisting for the first time.
2. Holding regular scheduled office hours.
3. Grading papers for sections of courses in which he/she assists, and turning in grade reports in a timely manner.
4. Preparing teaching aids (outlines, drawings, test, etc.) for sections of courses in which he/she assists. Assistants who have not fulfilled all of their hourly obligations by the end of the semester may be asked to do additional tasks by the instructor or by the Department.

B. Time Records

Written weekly time records are to be kept by each assistant of his/her own time spent working for the Department.

C. Good Standing

All graduate assistants must maintain a grade average of "B" in conformity with the Graduate College regulations on academic standards and must perform assigned duties in a manner satisfactory to the Department.

1. *Graduate Assistantships*

- (a) Master of Science Candidate. A student beginning graduate work at this level with an assistantship may be retained in this position for four regular semesters, subject to satisfactory progress and performance, whichever is the shorter time.
- (b) Ph.D. Candidate. These students may expect to retain his/her assistantship for three regular school years (6 semesters), or until his/her degree is completed, whichever is the shorter time.
- (c) The above regulations apply to trainees and students on fellowships also.
- (d) Statement of Intent. A statement of intent will be due each spring in regard to an assistantship for the following year.

2. *Research Assistantships*. The length of time a student is employed on a research assistantship will be left to the discretion of the professor under whom the student is employed.

3. *General Considerations.*

- (a) If the degree is not completed in the prescribed length of time, the student may submit an application to the Chair of the Department for extension of the assistantship if it appears that the degree can be finished within one year.
- (b) Summer assistantships will not be considered as fulfilling any of the time allotted on an assistantship.

D. Tuition Waiver

In the spring or fall semester, a student who began her/his current master's or doctoral degree program in or after the 2010 Fall Semester may be eligible for a waiver of up to the total number of hours remaining toward the degree provided that s/he enrolls in 5 or more credit hours and holds a graduate assistantship total of at least .50 FTE. In the summer, a student's eligibility for a waiver is based on whether s/he held or will hold a qualifying appointment in the preceding spring or following fall semester.

A student's maximum total waiver over the course of a single degree program is the number of hours remaining toward the degree when s/he first receives a tuition waiver. If a student in the final semester of the degree program is only eligible for 1-4 hours, s/he may receive an additional waiver of up to the minimum enrollment required to qualify for a waiver.

E. Professional Ethics Training – Responsible Conduct of Research (PET-RCR)

Beginning fall 2010-11, all graduate assistants (GRAs and GTAs) who wish to receive the Qualified Graduate Assistant tuition waiver must complete a two-day Professional Ethics Training – Responsible Conduct of Research (PET-RCR) workshop. This university requirement will apply to any new student who starts his/her degree program after the end of the 2010 spring semester.

F. Outside Employment

In order to comply with university regulations, some of which are bound by State law, a graduate assistant may not accept additional employment without written permission of the Department Chair.

VI. SPECIAL REGULATIONS FOR GRADUATE ASSISTANTS

A. Definition

A graduate assistant is defined as any graduate student appointed as a graduate teaching or research assistant or graduate teaching or research associate.

B. Workload

Because one of the primary purposes of a graduate assistant appointment is to aid the student in the successful completion of a graduate program, graduate assistants may not be appointed for more than one-half (0.5 FTE) employment without special permission of the Graduate College Dean. The Department must submit a written justification with all appointments greater than 0.5 FTE. A 0.5 FTE graduate teaching assistant would normally involve twenty hours per week. This would include time spent in the classroom or laboratory, preparations, office hours, etc.

C. Enrollment Load

The graduate assistant's academic course load for each term should ensure that he/she is making satisfactory progress toward the degree. However, the minimum enrollment for fall and spring semesters must be six credit hours.

D. English Proficiency for International Graduate Assistants

Students wishing to be certified as proficient in English must present evidence in both oral and written English. Tests are administered by the University's English Assessment Office (You may pick up current information from the English Assessment Office in Robertson Hall 201).

E. Thesis/Dissertation Information

The Thesis/Dissertation may be prepared in any format acceptable to the Department and Committee with the exceptions indicated in the Graduate College information packet. (You may pick up current information from the Graduate College in Robertson Hall 100, or retrieve information on-line at <http://gradweb.ou.edu/docs/info/index.htm>.)

If you have any questions about your degree program, please contact your major professor or the Chair of the Department.