

Graduate Handbook

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INTRODUCTION

This handbook has been written to provide information for graduate students and faculty on the policies, procedures, and requirements for the M.S. Degree in Biology. Additional information on the graduate curriculum and on writing theses can be found in the "WIU Graduate Catalog" and the Department of Biological Sciences "Thesis Guide". Copies of the "WIU Graduate Catalog" can be obtained from the Graduate School Office and the "Thesis Guide" is available from the Biological Sciences Departmental Secretary (WG 372). All of these documents can also be downloaded from the Department web site at www.wiu.edu/biology/graduate/.

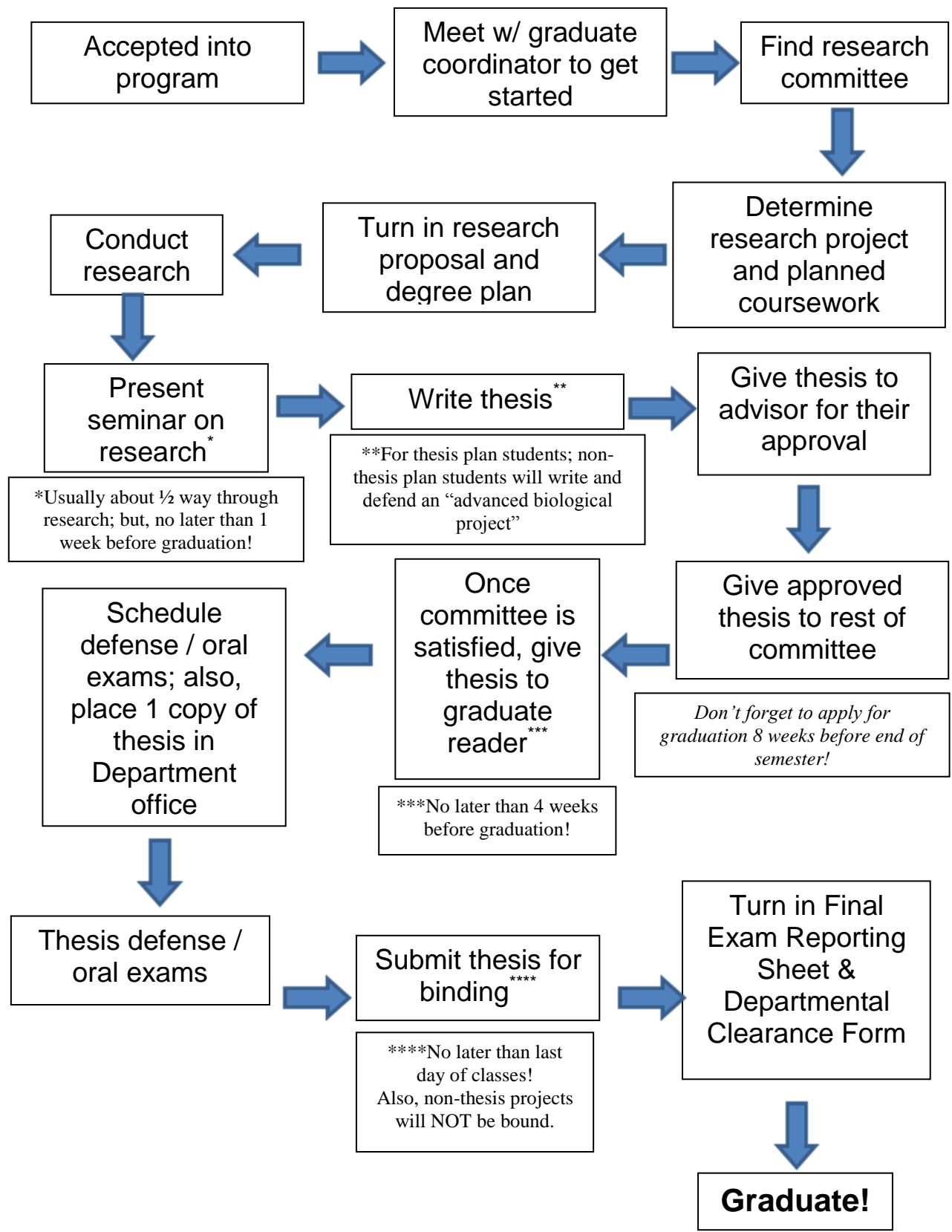
Biological Sciences at WIU started in 1909 in the Department of Agriculture and Biology. Biological Sciences and Agriculture became separate departments in 1929. The Department of Biological Sciences initially consisted of three faculty members. Dr. Harry D. Waggoner, from whom Waggoner Hall gets its name, was the first Department Chair. In 1946, Marvin R. Sibert wrote the first M.S. Thesis accepted by the Department of Biological Sciences on "The Control of Weeds on a Typical Prairie Farm" under the direction of Dr. Waggoner. Since then, our graduate students have written more than 550 theses.

CHECKLIST OF STEPS TO COMPLETE

- ___ 1. Apply to program and find thesis or advanced biological project (non-thesis) advisor.
- ___ 2. Admitted to graduate program
- ___ 3. Meet with graduate committee chair
 - ___ a. Review transcripts for deficiencies
 - ___ b. Choose plan of study
 - 1) Thesis plan
 - 2) Non-thesis plan
 - ___ c. Review program requirements
- ___ 4. Choose thesis or non-thesis plan committee
- ___ 5. File a *Graduate Degree Plan* (after 9 hrs and before completing 15 hrs)
- ___ 6. File a *Thesis Proposal* or *Non-Thesis Project Proposal* (submitted with *Graduate Degree Plan*)
- ___ 7. Complete any undergraduate deficiencies
- ___ 8. Complete core, elective, and other required graduate courses
- ___ 9. Present seminar on thesis or advanced biological project
- ___ 10. Apply for graduation 8 weeks prior to end of semester in which you plan to graduate
- ___ 11. Have thesis or advanced project approved by your committee
- ___ 12. Thesis or advanced project read for format corrections by graduate reader
- ___ 13. Take final oral examination
- ___ 14. Complete Departmental Clearance Form
- ___ 15. All course revalidations, final grades, departmental academic clearance forms, and official transcripts for transfer work must be completed and in the School of Graduate Studies by the last day of the student's final semester (minimum 3.0 GPA and not more than 2 grades of C or lower required for graduation).

GENERAL FLOW CHART FOR COMPLETING A MASTER'S DEGREE

(Details for each step found below – note that during this entire process, you are also taking classes!)



INFORMATION AND PROCEDURES

Admission Requirements

- see WIU Graduate Catalog at www.wiu.edu/grad/catalog/biology.php

Graduate Committee Chair (AKA Graduate Coordinator)

- Provides information on the graduate program
- Provides orientation for new graduate students
- Reviews transcripts for deficiencies
- Keeps graduate student records
- Serves as the advisor until thesis or non-thesis advisor is selected

Undergraduate Deficiencies

- See WIU Undergraduate Catalog, must fulfill biology and other science and mathematics requirements for Bachelor of Science
- Undergraduate courses may be taken pass/fail
- Do not list undergraduate deficiencies on Degree Plan; these will be monitored in the Department and thus do not need to be on the Degree Plan

Graduate Core Courses

- All students are required to take the graduate core courses
- Students who feel they have sufficient course background in one or more of the core areas should meet with the Graduate Committee Chair. They will be referred to the appropriate core course instructor. If the course instructor determines the student has sufficient knowledge, a form (available in WG 372) will be completed and given to the Graduate Committee Chair indicating that the student does not need to take the course. Credits, however, will not be given for waived courses and must be fulfilled with elective courses.

Total Hours and Financial Aid

- Minimum total hours necessary to graduate is 32; however, sometimes students need extra hours to complete their thesis
- Note that most financial aid will not allow a student to take an unlimited number of hours; usually, financial aid is cut off after 48 total hours (however, the Financial Aid Office makes these decisions and students should contact that office for questions! The 48 hours previously mentioned is for guideline purposes only!)

Degree Plan

- See degree requirements in WIU Graduate Catalog of the year course work initiated
- Should be filed after 9 hrs and before completing 15 hrs of graduate courses
- Instructions for completing the degree plan are found in Appendix A, and a blank template is available from the web site
- Prepared by the student with assistance from the secretary as needed

Incompletes

- All “I” grades will automatically change to an “F” after 1 year
- If you need an extension for an “I” grade, you must submit the form found in Appendix A
 - o If the “I” if for BIOL 600 or BIOL 601, your advisor can simply email the grad school and ask for an extension; they will need to give the semester during which you registered for the BIOL 600 or BIOL 601 and they will need to give a date to which to extend the “I”
- The student **MUST** initiate this procedure
- NOTE that the grade will revert to an “F” on the last day of the semester, which is BEFORE grades are turned in; thus, if you don’t have the proper form on file your grade will become an “F” regardless of what grade is submitted for you

Seminar Attendance

- Seminars are presented throughout the semester; seminars are not just those given by graduate students in the Department, but also can be guest speakers, individuals interviewing for a position in the Department, etc.
- All on-campus graduate students are required to attend all Departmental seminars
- Seminar coordinator will inform you of all seminars
- This is NOT BIOL 570 (seminar), which is a unique class which meets like a regular lecture and for which you receive credit

Advisor (Thesis or Non-Thesis)

- Not assigned but mutually agreed on by student and a faculty member
- Advises on and approves content of the degree plan
- Directs student's thesis research or advanced project research
- Responsible with student for final format of thesis or advanced project
- Helps select Thesis or Non-Thesis Committee
- Chairman of the Final Oral Examination Committee
- **Students must find a thesis or non-thesis advisor before applying for grad school!**

Thesis or Non-Thesis Committee

- Consists of advisor and two other departmental graduate faculty members. An adjunct faculty member or faculty from another WIU Department who are approved by the Chair of the Department Graduate Committee and the thesis advisor can replace 1 biology department committee member.
- Serves as the Final Oral Examination Committee
- Students should have an initial meeting with their committee during which the proposed research is discussed
- Meetings should be held at least once a semester with the thesis committee to keep the members informed on the progress of the research
- If a student’s interests change or an advisor or a committee member’s ability to work with a student changes, a new advisor or committee member may be selected. The change should be discussed with the Chair of the Department

Graduate Committee and/or the Department Chair and the new committee member must agree to serve on the student's committee prior to formal changes being made.

Thesis/Advanced Biological Project Proposal

- Is a brief summary of proposed research
- All students (both thesis students and non-thesis students) must complete a proposal
- Requires signatures of advisor and thesis committee members
- Follow instructions below (in Appendix A) and/or request assistance from the Departmental Secretary in WG 372.
- Submitted with the Graduate Degree Plan, but remains in departmental files

Thesis

- Topic selected and research conducted in consultation with the advisor
- Thesis students must take 1 hour of BIOL 576 (survey of literature)
- Thesis students must take at least 6 hours of BIOL 600 (research)
- Thesis students must also take 3 hours of BIOL 601 (thesis)

Advanced Biological Project (Non-thesis Project)

- For non-thesis students
- May be a short duration field or laboratory project, or an internship
 - o Internships require 60 hours work for each credit hour claimed, thus to graduate you need at least 180 hours of internship
 - o Students who are also pursuing a PBC can use the same internship for both the PBC and the advanced biological project
- Topic selected and research conducted in consultation with the advisor
- Non-thesis students must take 1 hour of BIOL 576 (survey of literature)
- Non-thesis students must take 3 hours of BIOL 577 (research problems)
- Advanced Biological Project is written and defended, just like a thesis, but it is NOT bound and will NOT be in the Library's collection (or the online database); it will be kept in electronic form in the Department
- The Advance Biological Project report does NOT need to be read by the graduate reader
- Students working on an Advanced Biological Project must also give a seminar on their project

Graduate Internships (BIOL 595)

To receive credit for BIOL 595 (Graduate Internship), the student must first have the internship approved by their committee and the Department chair. To aid in this decision, the student must provide a written proposal for the internship which addresses the following topics:

- What is the company?

- What will the duties be?
 - o This item should be in as much detail as possible
- How many hours are expected (both weekly and in total)?
 - o Minimum 60 contact hours per credit hour requested
- What are the potential benefits to the student's graduate education?

Once the internship is completed, the student must complete a written summary of the internship which addresses the following topics:

- What were the original objectives?
- What specific tasks were performed as part of the internship?
- What knowledge and experience did the student obtain, and how applicable are these skills to the student's future career or research?
- What limitations or difficulties did the student experience?
- The final report must also contain a letter or statement from the internship supervisor indicating their evaluation of the student's performance.

Students can use the same internship for BIOL 595 and for their non-thesis Advanced Biological Project (BIOL 577); however, students must obtain 60 contact hours for each credit hour requested. Thus, to use the same internship for both BIOL 595 and BIOL 577 the student would need at least 360 contact hours (60 hours X 3 credits of BIOL 595 = 180 contact hours plus 60 hours X 3 credits of BIOL 577 = 180 contact hours). You can only apply 3 hours of BIOL 595 toward your degree plan, however it is repeatable up to 12 hours.

Seminar on Thesis or Advanced Biological Project

- Presented when sufficient research has been completed to produce presentable results
- Schedule date with seminar coordinator; when possible, it should be during weekly seminar time when classes are in session
- Allow enough time so announcements can be distributed to the faculty and graduate students at least 5 working days before the seminar
- Thesis/non-thesis committee must be available to attend

Thesis/Advanced Biological Project Reading by Student's Committee

- Advisor reads thesis for content and format
- Thesis committee reads thesis for content and format
- Student makes required corrections; this may require several drafts before a final copy is completed
- Advisor and committee check final copy for both content and format before submitting it to the Department Graduate Committee

Thesis Reading by Graduate Reader

- Provide an electronic copy in final corrected form to the Graduate Committee Chair who will assign a member of the Graduate Committee as the Graduate Reader

- The Graduate Reader may refuse to read a thesis if it has excessive format errors
- Corrections are given to the student
- Student makes corrections
- Corrected copy shown to Graduate Reader for final checking
- Final version of the thesis is submitted to grad school electronically (website address will be provided to student once the final electronic version is approved)
- The Graduate Committee and Department Chair will not require any changes be made in the content or format of the thesis after this point, but the student's thesis committee and advisor may require change
- The Graduate School will also check the thesis for content and might ask for further corrections

Final Oral Examination

Scheduling:

- Coordinate a date and time for the Final Oral Examination with the advisor and thesis committee; Note that the thesis must be turned in to the Graduate School by the last day of regular classes, so the oral exam needs to be scheduled far enough in advance so that any corrections can be made prior to this deadline.
- The advisor will inform the Department Graduate Committee and Department Chair to have the Departmental Secretary prepare and distribute a copy of the announcement to each faculty member at least 5 working days before the examination
- Students must give a final version copy of their thesis/advanced biological project to the Departmental Secretary at least 5 working days prior to the exam
 - o This version should be an electronic copy (in *.pdf format)
 - o Thesis will be emailed to interested parties
- Final Oral Examinations can be held any time that the student and examining committee are available. It is preferable, however, to have the exam while classes are in session or at other times that allow interested faculty to conveniently attend
- The student should ensure that all members of the committee have a final version copy of the thesis/advanced biological project

Examination Procedures:

- The Research Advisor is the Chair of the Final Oral Examination Committee, the other voting members are the members of the student's Committee
- Other faculty members may attend the examination and ask questions at the invitation of the committee chair
- The Research Advisor will obtain from the Departmental Secretary before the exam the following: Departmental Clearance Form, Final Oral Examination Report Form, and copies of the thesis
- The suggested time for the oral examination is 2 hours
- The first part of the examination will consist of a defense of the thesis/advanced biological project

- The second part of the examination will consist of questions on the student's specific area of interest, as well as questions to test the student's general knowledge of biology (see Final Examination Report Form (Appendix A) - it is strongly recommended that the student allow sufficient time prior to the examination for preparation to assure an acceptable level of performance)
- Non-thesis students will likely spend less time on the defense of the Advanced Biological Project and more time on examination of general knowledge of biology
- To have an acceptable thesis/advanced biological project and pass the final oral examination, the majority of the Final Oral Examination Committee must agree that the student's performance was satisfactory (the advisor must be part of the approving majority)
- If the student's performance is considered satisfactory by the committee, the advisor and the committee members will sign the thesis/advanced biological project and complete and sign the Final Oral Examination Report Form.
- If the student's performance is considered unsatisfactory by the committee, the examining committee may require another examination(s) which may be oral or written and must be completed with one year after the original exam.

After the Examination:

- Complete and sign the Departmental Clearance Form
- The advisor in conjunction with the student will submit the thesis electronically (the non-thesis advanced biological project will be submitted to the Graduate Coordinator)
- The Graduate Coordinator will complete any Change of Grade Forms required. A grade for BIOL 601 (thesis) or BIOL 577 (research problems) will not be issued until the student has successfully completed the oral defense and completed all other Department requirements
- Give the completed Departmental Clearance Form and completed Final Oral Examination Report Form to Department Graduate Coordinator
- The student will order bound copies of the thesis from the electronic submission website; each student must order a minimum of 2 copies (1 for the library and 1 for the advisor; most students will also order at least 1 more copy for themselves)

POLICIES AND FACILITIES

Graduate Student Offices – The department will provide office space for each full time graduate student if space is available. A student must be registered for graduate course(s) in the department to be eligible for an office. The Department Chair is in charge of assigning graduate student offices and access to research equipment and laboratory space.

Keys - The department will provide keys for entry to the building and graduate student offices. See the Department Chair's Secretary (WG316) to obtain keys. The actual distribution of keys will be coordinated by the Office of Public Safety.

Previous Theses - Theses written by previous graduate students may be checked out from the Departmental Thesis Library in WG 372 for up to 30 days. A limit of three theses can be loaned out at one time. In order to graduate and have your transcripts cleared, all theses borrowed from this library must be returned to the Departmental Secretary (WG 372). More recent theses can be found online at the Library's web site.

Facilities and Equipment - The facilities and equipment in the department are available for use by graduate students. There is a faculty or staff member who serves as a coordinator for each facility or piece of equipment that is available for general use. Some of the facilities and equipment available include the animal room, audio-visual equipment, boats, computers, dark room, environmental rooms, greenhouse, microscopes, cell and molecular biology instrument laboratory, shop, and stockroom. The Department Chair's Secretary (WG 316) can provide you with the names of the coordinators of the various facilities and equipment. You must consult with the appropriate coordinator before using any of the equipment or facilities. Additional equipment may be found in individual faculty member's research and teaching laboratories. This equipment may only be used if the faculty member in charge of the equipment or facility grants permission.

Kibbe Station and other Properties - These properties are available for graduate student use. They may not be used, however, without permission from the Kibbe Station Director since specific regulations apply to their use and management.

Graduate Teaching Assistants (TA) - Graduate Teaching Assistants primarily teach and set up introductory biology, microbiology, ecology, and human anatomy and physiology laboratories, plus they help in the Biology Assistance Center. They are selected by the Department Graduate Committee. Selection is based on GPA, letter of application, letters of recommendation, and an interview. Duties are assigned by the Biology Laboratory Coordinator.

Assistantships are awarded for a maximum of 2 years, but may be cancelled if the required duties are not carried out satisfactorily. All TA's must attend the TA workshop given just prior to the start of the fall semester each year.

Graduate Research Assistants (RA) and General Assistants (GA) - Research assistants work on faculty research projects and duties and work responsibilities are arranged with faculty members who have grants support for the positions. Selection is based on requirements of the individual faculty members.

Graduate assistants must be full time students. For GAs and RAs that is 9 hours per semester, while for TAs it is 6 hours per semester. Courses must be graduate courses or courses which are designated as undergraduate deficiencies. Graduate students receiving federal financial aid will not receive aid if they have completed more than 9 hours of BIOL 600 (Research) and/or more than 9 hours beyond minimum course requirements as listed in the graduate catalog.

APPENDIX A – INSTRUCTIONS AND FORMS

Instructions for Graduate Degree Plan

Download from the Biology Graduate web page
(<http://www.wiu.edu/biology/graduate/>)

Instructions for Thesis/Advanced Biological Project Proposal Form

Download from the Biology Graduate web page
(<http://www.wiu.edu/biology/graduate/>)

Final Oral Examination Report Form

Download from the Biology Graduate web page
(<http://www.wiu.edu/biology/graduate/>)

Departmental Clearance Form

Download from the Biology Graduate web page
(<http://www.wiu.edu/biology/graduate/>)

Request for Extension of Time for Graduate Level Incompletes

Ask the instructor to email the grad school and ask for an extension of the “I”