

Graduate Student Handbook 2019-2020

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Please carefully read over the information found within this handbook. Graduate students will be held to the deadlines and requirements found within. The handbook is updated each year and therefore should be carefully reviewed annually for changes to policies and procedures.



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ORGANIZATION OF THE DEPARTMENT

The Department of Biology is 1 of 7 departments in the College of Life Sciences. Within the department there are 26 full-time faculty and 3 full-time staff.

DEPARTMENT OF BIOLOGY STAFF

Stephanie Burdett. *Biology 100 Coordinator.* Coordinates the teaching of all Bio 100 sections. If you would like to TA or teach a section of Bio 100, work with your advisor and Stephanie. 2056B LSB. 801-422-4339. stephanie_burdett@byu.edu

Nicole Cuthbert. *Biology Office Manager.* Works with all faculty and undergraduate students in the Department of Biology. See her regarding any questions on classroom scheduling and adding course sections. 4104 LSB. 801-422-7389. nicole.cuthbert@byu.edu

Gentri Glaitli. *Biology Graduate Program Manager.* Works with all graduate students and their advisors. Meet with her for any questions regarding requirements, deadlines, forms, policies, and procedures. 4101 LSB. 801-422-7137. gentri@byu.edu

Jim Wooten. *Biology Financial Manager.* Works with all faculty and students regarding financial transactions. Any financial or travel questions should be directed to him. 4106 LSB. 801-422-4412. jim_wooten@byu.edu

DEPARTMENT OF BIOLOGY FACULTY

*Faculty members with an asterisk are approved to be graduate committee chairs and committee members.

***Byron J. Adams.** Comparative phylogeography; evolution of virulence; host-pathogen coevolution; soil ecology; molecular systematics and evolution; speciation and species concepts; food web assembly; biodiversity; ecosystem functioning. 4127 LSB. 801-422-3132. byron_adams@byu.edu

***Elizabeth G. Bailey.** Gender gaps in biology education; reciprocal peer tutoring; course structures that promote growth mindset; cumulative assessment; integration of math and biology; membrane biophysics. 4146 LSB. 801-422-0871. liz_bailey@byu.edu

***Mark C. Belk.** Terrestrial and aquatic ecology; ecology of fishes; native fish conservation; fisheries; burying beetles; parasites; life-history responses to biotic and abiotic perturbations; predation and competition in size-structured populations; adaptation of organisms to local environments in terms of habitat use, coloration, and acoustic signals. 4023 LSB. 801-422-4154. mark_belk@byu.edu

***Seth M. Bybee.** Entomology; evolutionary biology; systematics; bioinformatics; phylogenetics; dragonflies; visual evolution. 4057 LSB. 801-422-3152. seth.bybee@byu.edu

***Shawn M. Clark.** Museum curation of insect collections; insect systematics. 3101E MLBM. 801-422-3815. shawn_clark@byu.edu

***Richard A. Gill.** Global change biology; community responses to climate variability; ecosystem ecology; plant physiological ecology; evolution; biogeography. 4101A LSB. 801-422-3856. rgill@byu.edu

***Blaine D. Griffen.** Behavioral ecology; physiological ecology; population and community ecology; marine biology and ecology; conservation biology; extinction; zooplankton, crabs, shrimp, polar bears. 2121 LSB. 801-422-5930. blaine_griffen@byu.edu

***Jaime L. Jensen.** Biological science education; evolution education and acceptance; effective pedagogical strategies to increase scientific reasoning skills; pedagogical manipulations; pedagogical preparations; inquiry teaching; educational assessment. 4059 LSB. 801-422-6896. jaimie.jensen@byu.edu

***Jerald B. Johnson.** Evolutionary ecology; ecological speciation; life history evolution; evolution of mating and reproductive strategies; behavioral ecology; biological statistics; phylogeography; natural history and molecular systematics of desert fishes and tropical freshwater fishes. 4033 LSB. 801-422-4502. jerry.johnson@byu.edu

***Leigh A. Johnson.** Plant systematics; taxonomy; phylogenetic inference; species delimitation; phylogeography; morphology; evolution; conservation genetics; population genetics. 4058 LSB. 801-422-5241. leigh_johnson@byu.edu

***Robert L. Johnson.** Plant systematics and taxonomy; floristics; plant-insect interactions. 3115A MLBM. 801-422-7094. robert_johnson@byu.edu

***John S. K. Kauwe.** Bioinformatics; genetics of human disease; relationship between genotype and phenotype; genetic risk factors for Alzheimer's disease; prevention, diagnosis, and genetic basis of rheumatic heart disease; population genetics of aquatic organisms in the Western United States. 4102 LSB. 801-422-2993. kauwe@byu.edu

***Roger T. Koide.** Physiological, population, and community ecology of plants and associated fungi, including mycorrhizal and endophytic fungi, and bacteria in natural and agricultural ecosystems; gut microbiomes of vertebrates and insects; agricultural ecology; global change biology. 4031 LSB. 801-422-6650. rogerkoide@byu.edu

***Steven D. Leavitt.** Fungal symbioses; evolutionary diversification; molecular systematics and phylogenomics; role of species interactions within an evolutionary context; fungal symbioses; lichens; holobionts; biomonitoring and climate change; conservation; biogeography and diversity in arid or extreme habitats; scientific education; outreach. 4143 LSB. 801-422-4879. steve_leavitt@byu.edu

***C. Riley Nelson.** Natural history; entomology; freshwater ecology; taxonomy; systematics; ecology; evolution; insect biodiversity in aquatic and desert habitats; environmental stewardship; biomonitoring; development of field guides; popularization of science; science education. 2119 LSB. 801-422-1345. rileynelson@byu.edu

***Samuel H. Payne.** Bioinformatics; cancer biology; proteomics; protein function. 4029 LSB. 801-422-6652. sam_payne@byu.edu

***Steven L. Peck.** Spatial processes in ecology and population biology from both applied and theoretical perspectives, specifically in understanding how spatial dynamics influence the spread of insecticide resistance; the effect of gene flow of evolution and speciation; philosophy and history of biology; biomathematics; simulation modeling; philosophy of simulation; evolution and philosophy; evolution and theology; bioethics. 4145 LSB. 801-422-4145. steven_peck@byu.edu

***Stephen R. Piccolo.** Bioinformatics; genomics; human disease (especially cancers); medicine; data science; transcriptomics. 4056 LSB. 801-422-7116. stephen_piccolo@byu.edu

***Russell B. Rader.** Freshwater ecology; evolutionary biology; processes that determine stream and wetland community structure; ecology and evolution of biological invasions; spatial and temporal variation in stream drift; trout-invertebrate interactions; wetland bio assessment; restoration; conservation. 4025 LSB. 801-422-9159. russell_rader@byu.edu

***Perry G. Ridge.** Bioinformatics; computational biology; genetics; human disease. 4126 LSB. 801-422-7564. perry.ridge@byu.edu

***Beverly L. Roeder.** Anatomy; animal disease physiology; regenerative medicine; biomedical research; medicine and surgery; animal health, prevention and diagnosis of metabolic disorders; stable isotope techniques to understand Great Basin rattlesnake and temporal movements; the physiologic and nutritional ecology of bears. 2120 LSB. 801-422-6873. beverly_roeder@byu.edu

***Duke S. Rogers.** Phylogenetic systematics and evolution of mammals; conservation biology; phylogeography; biodiversity. 2103C MLBM. 801-422-5898. duke_rogers@byu.edu

Joshua A. Stowers. Biology teaching. 2122 LSB. 801-422-0873. josh_stowers@byu.edu

***Clinton J. Whipple.** Genetic mechanisms that determine plant morphology; evolution of plant development; focus on grasses including agronomically important traits in cereals such as maize, barley, and rice. 4027 LSB. 801-422-9293. whipple@byu.edu

***Michael F. Whiting.** Entomology; bioinformatics evolution; systematics; phylogeny of insects based on molecular and morphological evidence with emphasis on reconstructing the insect tree of life; computational phylogenomics; molecular evolution of insect vision; deciphering early patterns of insect diversification. 4142 LSB. 801-422-5651. michael_whiting@byu.edu

Edward R. Wilcox. DNA sequencing and instruments. 4046A LSB. 801-422-3647. edward_wilcox@byu.edu

To see more information about the above faculty, please see <http://biology.byu.edu/Faculty-and-Staff>

GRADUATE PROGRAM

DEGREES OFFERED

Graduate degrees offered in the Department of Biology are a MS in Biology, MS in Biological Science Education, and PhD in Biology. There is no teacher certification program in our Biological Science Education master's program, but certification is possible through Utah's Alternative Routes to Licensure (ARL) program.

GENERAL INFORMATION

The guidelines in this handbook have been prepared for graduate students in the Department of Biology and must be used in conjunction with those contained in the Graduate Catalog and the graduate section of the General Catalog. Graduate students must stay informed about changes made to guidelines each year at both the department and university level. It is ultimately the student's responsibility to be in compliance with all department and university regulations. Students will be required to sign and submit a contract each year stating that they are familiar with the current requirements. Forms for exceptions to policy are available from the graduate program manager or online through the Graduate Studies website. Petitions must be signed by the chair of the advisory committee, the department graduate coordinator, department chair, and the college dean prior to being submitted to the Graduate Studies office.

HONOR CODE STATEMENT

"We believe in being honest, true, chaste, benevolent, virtuous, and in doing good to all men . . . If there is anything virtuous, lovely, or of good report or praiseworthy, we seek after these things" (Thirteenth Article of Faith).

As a matter of personal commitment, the faculty, administration, staff, and students of Brigham Young University, Brigham Young University-Hawaii, Brigham Young University-Idaho, and LDS Business College seek to demonstrate in daily living on and off campus those moral virtues encompassed in the gospel of Jesus Christ, and will:

- Be honest.
- Live a chaste and virtuous life.
- Obey the law and all campus policies.
- Use clean language.
- Respect others.
- Abstain from alcoholic beverages, tobacco, tea, coffee, and substance abuse.
- Participate regularly in church services.
- Observe Dress and Grooming Standards.
- Encourage others in their commitment to comply with the Honor Code.

Specific policies embodied in the Honor Code include (1) the Academic Honesty Policy, (2) the Dress and Grooming Standards, (3) the Residential Living Standards, and (4) the Continuing Student Ecclesiastical Endorsement Requirement. (Refer to institutional policies for more detailed information.)

APPLICATION AND ADMISSION

INFORMATION

Our admissions criteria for graduate students coincide with the criteria currently published in the BYU Graduate Catalog, College of Life Sciences, as well as the Graduate Council's Principles and Characteristics of Graduate Education. Pursuant to this, the following basic guidelines are used:

- a. All applicants are required to have a minimum cumulative GPA of 3.0 on a 4.0 scale from their undergraduate degree.
- b. No graduate candidate can be accepted unless he or she has a faculty member in the department who is willing to serve as the committee advisor to that student. The faculty member must be within the Department of Biology and approved for Graduate Faculty Status (see previous list of Department Faculty) according to the department and college guidelines.

ACCEPTANCE CRITERIA

Acceptance is based on a balanced consideration of several areas including:

- a. GPA (cumulative) for completed undergraduate degree. Coursework will be analyzed by the department based on all classes taken. Successful candidates typically have an undergraduate GPA of 3.5 or better.
- b. English proficiency for international applicants as assessed through one of the acceptable English proficiency tests (TOEFL, E3PT, IELTS, or CAE).
- c. Each candidate is required to submit 3 letters of recommendation from associates who have some understanding of the applicant's abilities in relationship to the requirements of the graduate program. Preference will be given to those with a scientific background and/or those with advanced degrees with whom the candidate worked closely.
- d. Strong consideration will be given to those candidates with professional experience in the field of biology whether it is work, internships, or research. This experience could include special projects that resulted in publication and/or presentations at professional meetings.
- e. A clearly defined statement of intent. The statement of intent should include areas of research interest as well as research ideas, career goals, and a preferred advisor.
- f. No student can or will be accepted unless he or she has a faculty member in the department who is willing to serve as the committee advisor to the student. It is highly recommended to contact faculty in the department *prior* to application.

- g. There is no "Provisional Status" category for the department; students are either qualified to be admitted or will be denied. Those requiring an exception to University guidelines will be accepted on a Provisional Status at the university level.

APPLICATION DEADLINE

- a. Graduate student applications are evaluated once per year for admission into the Fall Semester.
- b. Applications are due through the BYU Graduate Studies website no later than January 15th. Acceptances are generally sent out by early March.

REQUIREMENTS FOR ADMISSION

- a. A complete application must be submitted through the BYU Graduate Studies website no later than January 15th of each year. A complete application will include the following components:
 - a. The filled out online application.
 - b. Desired Advisor: State a preferred advisor. The applicant should make contact with their desired advisor prior to submitting their application.
 - c. 3 Letters of Recommendation. Preference is given to letters that are written by those with a scientific background and/or those with advanced degrees with whom the candidate worked closely.
 - d. Statement of Intent: The statement of intent should clearly define areas of research interest as well as research ideas, career goals, and a preferred advisor.
 - e. Resume (optional)
 - f. \$50 Application Fee paid
 - g. All **unofficial** transcripts submitted. Students must upload an unofficial transcript or academic record for each institution attended (even if a degree hasn't been received yet) when completing the online application. If recommended for admission, **official** transcripts will need to be sent to Graduate Studies. Accepted international applicants must initiate and complete the IERF foreign credential evaluation report.
- b. Applicants must agree to maintain the University's [Honor Code](#).
- c. Applicants must receive an [ecclesiastical endorsement](#).
- d. Applicants must have at least a baccalaureate degree from an accredited U.S. university or the equivalent from an international university (a 4- or 5-year program) before matriculation. The Graduate Studies office must receive an official transcript showing that the degree has been awarded. Study at BYU cannot continue past the first semester of a graduate program without BS verification.
- e. Applicants who are applying to the PhD program and are currently finishing a MS degree must have completed the MS degree by start of fall semester. If the MS degree is not completed by this time, the admissions offer will be withdrawn. The applicant can reapply for the following admissions cycle.
- f. Applicants must receive at least a 3.0 undergraduate cumulative GPA. All classes taken after the BS degree will not be counted in this undergraduate GPA but will be

considered along with the application. Applicants with a GPA below a 3.00 *may* be provisionally admitted.

- g. For applicants with English as a second language, they must submit the minimum required scores for one of the following acceptable English Proficiency Exams (applicants with scores below the minimum required *may* be provisionally admitted):
 - a. CAE
 - i. Minimum score of 185 (or grade of C)
 - b. E3PT
 - i. Overall minimum score of 79 (with minimum subscores of 21 in Speaking, Reading, and Listening, and a minimum subscore of 16 in Writing)
 - c. IELTS
 - i. Overall minimum band score of 7.0 (minimum band subscore of 6.0 in each module)
 - d. TOEFL (paper-based)
 - i. Minimum score of 580
 - e. TOEFL iBT (internet-based)
 - i. Overall minimum score of 85 (with minimum subscore of 22 in Speaking, and minimum subscores of 21 in Listening, Reading, and Writing)

Note: CAE, E3PT, IELTS, and TOEFL scores must be less than 2 years old at the time of enrollment.

*Students applying to more than one program on campus must submit a separate and complete application, including fee, for each program. Additional submission of scores is not required.

DEGREE REQUIREMENTS

CREDIT HOUR REQUIREMENTS

MASTER'S PROGRAM (MS)

- 30 credit hours (24 coursework hours and 6 thesis hours); 20 hours must be 500 level or above.
- No more than a total of 10 hours from non-degree, senior, and/or transfer credit can be applied toward the MS program. No Independent Study courses can be used.
- Undergraduate credit can only be used by a MS student upon approval. Graduate Studies allows up to 9 undergraduate credits (only 300 and 400 level courses) if they pertain to the area of study. Courses cannot count towards the BS degree requirements and be applied to the MS degree.
- More information can be found in the current Graduate Catalog under "Credit Policies."

DOCTORATE PROGRAM (PHD)

- 54 credit hours (36 coursework hours and 18 dissertation hours)
- No undergraduate coursework may apply to the doctoral program of study (100-400 level).
- Up to 18 hours of master's coursework may apply towards the required 36 hours. The advisory committee must approval all transfer courses from the MS transcript. All transfer hours must be within the field of study.

TRANSFER CREDITS

- Must be a graduate level course to transfer to a graduate program; no independent study.
- Must have received a B grade or better; no "P" grades.
- No more than 10 credit hours for MS students or 18 hours for PhD students may transfer.
- No international credits can be transferred without certification by examination.

REGISTRATION REQUIREMENTS

FIRST SEMESTER

- New students (MS and PhD) are required to enroll in at least 2 credit hours during the first semester or term in which they are admitted. The department encourages new students to enroll in at least 6 credits hours during their first semester.
- Recommended courses:
 - Bio 503—Research Orientation (1.0): Required for MS students, optional for PhD.

- Bio 691R—Graduate Seminar Series (0.5): MS students are required to take this class at least 2 semesters and PhD students must enroll for 4 semesters; all graduate students are encouraged to take this course as many semesters as possible.
- Attendance at university forums and devotionals is expected during the duration of the graduate program.

SUBSEQUENT YEARS IN ACTIVE STATUS

- University full-time status is 9 credit hours for graduate students.
- Doctoral students must satisfy a residency requirement of two consecutive semesters of 6 credit hours each.
- Minimum registration is 6 credit hours in an academic school year (September-August) after all coursework is completed. If 6 credit hours are not completed in any academic year, the student will be automatically dropped from the program. There is a \$600 nonrefundable re-enrollment fee to apply to resume graduate study.
- During the first term and last term in the program, students must register for at least 2 credit hours.

FINAL SEMESTER

- All students are required to enroll in at least 2 credit hours during the semester or term they graduate; there are no exceptions.
 - Fall: 2 hours
 - Winter: 2 hours
 - Spring: 2 hours
 - Summer
 - 1 hour Spring & 1 hour Summer, OR
 - 2 hours Spring, OR
 - 2 hours Summer
- Students wishing to graduate in December must have a current ecclesiastical endorsement (even if all requirements are satisfied prior to the start of the Fall semester). Ecclesiastical endorsements are due in March for the following academic year.

ELIGIBILITY FOR ON-CAMPUS EMPLOYMENT

- U.S. Citizens and Permanent Residents
 - Graduate students must be enrolled in at least 2 credit hours during the semester in which they are employed on campus (including all RA and TA positions).
 - Graduate students enrolled for the upcoming Fall semester may work during Spring and Summer terms without enrolling for courses; however, FICA taxes will be deducted from students' paychecks if they are not enrolled in at least 1 credit hour during Spring and Summer terms.
- International Students

- International students must be enrolled in 9 credit hours each semester and 4.5 credit hours each term they are employed. A petition may be obtained for those students who have completed their coursework.
- International students are exempt from paying FICA taxes.

DEFERRING THE GRADUATE PROGRAM

- Students who wish to defer must have completed at least 2 credit hours during the semester in which he/she was admitted with acceptable grades.
- Students may only defer their initial enrollment for the following reasons:
 - Medical
 - Military deployment
 - Missionary service
- During the deferment period, students will be excused from minimum registration requirements.
- Admitted applicants will need submit the appropriate Deferment Form (GS Form 13, 13-B, or 13-C, available online) before the start of the first semester for which they would have enrolled.
- The following stipulations apply:
 - Students must still complete the degree program in the required amount of time as stated by the university (5 years for MS; 8 years for PhD).
 - Admitted applicants who defer for missionary service, will need to obtain a new ecclesiastical endorsement from their mission president.
 - Students must return for the semester or term indicated on the Deferment Form.
 - Students may continue with the same research project (if still available) and with the support of the same major advisor and committee (as long as those individuals are at the university and are willing).
 - Granting a deferral is for enrollment only and does not imply the deferral of scholarships, fellowships, or assistantships. Financial support is not guaranteed for graduate students who wish to defer unless the department so specifies.
 - Only one Application to Resume Graduate Study (University Form 6) can be approved for an individual during his/her program.
 - Those who do not abide by the above procedures will incur a \$600 nonrefundable fee to re-enroll.

LEAVE OF ABSENCE

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STUDENT PROGRESS

REQUIREMENTS AND DEADLINES

**See all posted graduation deadlines for the semester in which you would like to graduate.

MS DEGREE

1. Program of Study and Selection of Advisory Committee
 - End of 1st semester
2. Prospectus and Oral Presentation to Committee
 - End of 2nd semester
3. Oral Examination
 - End of 3rd semester (after coursework is completed)
4. Defense of Research
 - When research is 75-90% complete (usually beginning of 4th semester)
5. Application for Graduation
 - 1st month of 4th or final semester (see posted graduation deadlines)
6. Scheduling of Thesis Defense and Submission of Draft
 - At least 2 weeks prior to Thesis Defense
7. Thesis Defense
 - At least 2 weeks after submission of Scheduling Form and Draft
8. College Thesis & ADV Form 8d Submission
 - Submit final thesis draft and signed ADV Form 8d to College Dean's Office per posted graduate deadlines.
9. Online Thesis (ETD) Submitted to Graduate Studies
 - After thesis is approved by College, submit thesis online in PDF format.
10. Submit ADV Form 8d to Graduate Studies
 - Once ETD status shows "Grad Office review," take ADV Form 8d to Graduate Studies.

PHD DEGREE

1. Program of Study and Selection of Advisory Committee
 - End of 2nd semester
2. Prospectus and Oral Presentation to Committee
 - End of 3rd semester
3. Qualifying Examination (Oral Exam, Literature Review, Grant Proposal)
 - End of 4th semester (after coursework is completed)
4. Defense of Research
 - When research is 75-90% complete (usually beginning of 5th year)
5. Application for Graduation
 - 1st month of final semester (see posted graduation deadlines)
6. Scheduling of Dissertation Defense and Submission of Draft
 - At least 2 weeks prior to Dissertation Defense
7. Dissertation Defense
 - At least 2 weeks after submission of Scheduling Form and Draft
8. College Dissertation & ADV Form 8d Submission
 - Submit final dissertation draft and signed ADV Form 8d to College Dean's Office per posted graduate deadlines.
9. Online Dissertation (ETD) Submitted to Graduate Studies

- After dissertation is approved by College, submit dissertation online in PDF format.
10. Submit ADV Form 8d to Graduate Studies
- Once ETD status shows "Grad Office review," upload dissertation to Proquest website (ADV Form 13) and complete the Survey of Earned Doctorates (ADV Form 14)
 - Then take ADV Form 8d to Graduate Studies.

BIANNUAL EVALUATIONS

- Students will be evaluated by their committee advisor in January and June of each year. Students may be evaluated at any other time if so desired by their advisor.
- Each student is rated as making satisfactory, marginal, or unsatisfactory progress.
- Both the advisor and the student must sign each evaluation.
- The evaluation is based on the following:
 - 1) Coursework performance
 - 2) Progress in research, writing, publishing, and presenting
 - 3) Completion of program requirements by posted deadlines
 - 4) TA responsibilities and evaluations
 - 5) General attitude
 - 6) Thesis/dissertation credit registration
 - 7) Contact with advisor and committee members
 - 8) Ethical and professional behavior
- Any student who is evaluated as either "Marginal" or "Unsatisfactory" will be notified in writing:
 - 1) What they need to do to make satisfactory progress.
 - 2) When each task needs to be accomplished.
 - 3) Which faculty member(s) they should contact for more information or support.
 - 4) What will happen if these tasks are not accomplished (e.g., an unsatisfactory rating for the next semester, termination from the program, etc.).
- Any student receiving a marginal and an unsatisfactory rating or 2 unsatisfactory ratings in succession will be terminated from the graduate program at the conclusion of the semester.
 - If a student receives a marginal rating one semester and is not making satisfactory progress the next semester, then the student must be rated as making unsatisfactory progress. A student may not be rated as making marginal progress in 2 sequential semesters; failing to correct marginal progress is unsatisfactory.
- Marginal progress may include the following:
 - 1) Grade in a course falling below C-.
 - 2) Failure to submit Program of Study.
 - 3) Failure to establish a graduate committee.
 - 4) Failure to submit an approved thesis/dissertation prospectus.
 - 5) Prospectus or thesis/dissertation draft not approved.
 - 6) Limited progress toward courses and requirements on Program of Study.
 - 7) Poor performance in teaching assistantships.
 - 8) Poor performance in research.

- 9) Limited progress towards publication.
 - 10) Registering for thesis/dissertation hours when little or no work has been done.
 - 11) Minimal contact with chair and advisory committee members.
- Unsatisfactory progress may include the following:
 - 1) Grade in a course falling below C-.
 - 2) Failing a course.
 - 3) Failure to complete Program of Study.
 - 4) Failure to establish a graduate committee.
 - 5) Failure to submit an approved thesis/dissertation prospectus.
 - 6) Failure of oral/qualifying exams.
 - 7) Prospectus or thesis/dissertation draft not approved.
 - 8) Lacking progress toward courses and requirements on Program of Study.
 - 9) Poor performance in teaching assistantships.
 - 10) Poor performance in research.
 - 11) Lacking progress towards publication.
 - 12) Registering for thesis/dissertation hours when little or no work has been done.
 - 13) Minimal or no contact with advisor and committee members.
 - 14) Concerns about ethical or professional behavior.
 - 15) Rated as marginal in previous review and has not remediated weak areas.
 - 16) Failure to resolve any problems or fulfill any requirements indicated in a previous marginal or unsatisfactory review.
 - The following information is completed for each evaluation:

This student's progress is rated as:

Satisfactory

Marginal

Unsatisfactory

Above Rating is based on the following criteria:

Has not completed a requirement by the stated deadline:

 - Establish a graduate committee and submit Program of Study form
(complete by end of 1st semester for MS or 2nd semester for PhD)
 - Submit Prospectus
(complete by end of 2nd semester for MS or 3rd semester for PhD)
 - Coursework Oral (MS) or Qualifying (PhD) Exam
(complete by end of 3rd semester for MS or 4th semester for PhD)
 - Defense of Research
(complete when research is 75-90% done)
 - Poor performance on Coursework Oral (MS) or Qualifying (PhD) Exam
 - GPA is below a 3.0 or has obtained less than a C- in a course on the Program of Study
 - Previous evaluation action not met
 - Performance on Teaching Evaluations:
 - Satisfactory
 - Marginal
 - Unsatisfactory

GUIDELINES FOR PROGRESS

- Requirement checks will be made by the graduate program manager at the end of each semester (fall, winter, and summer). At this time, delinquent warning memos will be sent to both the student and advisor. Each memo should be signed by the delinquent student and returned to the graduate program manager to acknowledge notification of possible consequences for missed deadlines.
- Any student who has missed a deadline will have one probationary semester to complete the requirement and become current on all posted requirements.
- Extensions of deadlines may only be obtained through permission by the committee advisor for legitimate need. If an extension is required, the Request for Extension of Requirement Deadline Form should be filled out, signed, and turned in to the graduate program manager.
- If a student has not completed the requirement within the probationary period, an additional memo will be sent to both the student and advisor stating that funding is suspended from the department. Suspension only applies to RA and TA assignments, not to tuition benefits if applicable.
- After 2 semesters of delinquent requirements, the student may be terminated based on evaluation by the graduate committee.

PROGRAM REQUIREMENTS

PROGRAM OF STUDY AND SELECTION OF ADVISORY COMMITTEE

PROGRAM OF STUDY

- Must be completed with the assistance of the Advisor.
- Must comply with above stated guidelines regarding credit hour requirements (30 total hours for MS students, 54 hours for PhD students).
- Must include these required courses:
 - Bio 503-*Research Orientation*: 1.0 credit (required for MS and PhD students who don't already have a MS degree)
 - Bio 691R-*Graduate Seminar Course*: 0.5 credits/semester
 - MS: 1.0 credit (2 semesters)
 - PhD: 2.0 credits (4 semesters)
 - Bio 699R-*Master's Thesis*: 6.0 credits
 - Bio 799R-*Doctoral Dissertation*: 18.0 credits

SELECTION OF ADVISORY COMMITTEE

- All members of the Advisory committee must sign the Program of Study form (ADV Form 3).
- Return the form to the graduate program manager by the posted deadline (MS at the end of the first semester, PhD at the end of the second semester).
- Members of the advisory committee must be cleared with the major advisor and be contacted individually and invited to be on the committee.
- If a minor is declared, one committee member must be from the minor department.
- Those unaffiliated with BYU must be approved by a Petition for Exception and include:

- Reason(s) for including a member from outside the university (e.g., what their specific qualifications are and what they bring to the committee that is unique)
- Documentation for how the member will be funded for travel to BYU (they are REQUIRED to be physically present at either the final defense, defense of research, oral exam, or prospectus).
- A current CV of the external member. The CV will be evaluated by Graduate Studies against the college standards for awarding "Graduate Faculty Status."

MS PROGRAM

- Due by the end of the 1st semester
- Minimum of 3 faculty members including the committee chair
- Typically a minimum of 2 members should be from the department

PHD PROGRAM

-
- Due by the end of the 2nd semester
- Minimum of 4 faculty members including the committee chair
- Typically a Minimum of 3 members should be from the department
- Only one external member (unaffiliated with BYU) may be included on a committee unless there are 6 total committee members

CHANGE OF PROGRAM OF STUDY OR ADVISORY COMMITTEE

PROGRAM OF STUDY OR ADVISORY COMMITTEE MEMBER CHANGE

- All changes must be listed on the Program of Study Change form (ADV Form 3b) and signed by all committee members (only new members need to sign if change in committee has occurred).
- Submit the completed form to the graduate program manager for final approval.

CHANGING COMMITTEE ADVISOR

- Each student accepted into the Department of Biology graduate program is expected to have spoken with a desired advisor about research interests, possible projects, office space, and funding for the student and project. As such, each item must be carefully evaluated to avoid a negative impact on both the student and advisor.
- Due to the impact that changing the advisor may have, the following steps must be followed:
 - Student must contact his/her current advisor and discuss in detail the original agreements and ramifications in changing advisors.

- Both parties must reach an agreement regarding if and when such a change can be made, so that the faculty advisor's needs and the student's progress are not adversely impacted.
- If a change is necessary, the student and the current advisor should meet with the new advisor and discuss the details regarding the change.
- A new agreement should be made with the new advisor regarding research, projects, office space, and funding.
- Once all parties agree to such a change, a memo signed by all three parties is sent to the graduate program manager and all members of the advisory committee.
- The request must be approved by the graduate coordinator before a change can be made.

PROSPECTUS

- Prospectus of Research should be 4 to 6 pages of relatively loose research ideas.
- Should be completed at the end of the 2nd semester for MS students and 3rd semester for PhD students.
- Prospectus must be submitted and presented to the advisory committee for feedback. Feedback should include help on narrowing the research interest, how to get started on the research project, and information on how to write a grant proposal (NSF, NIH, etc.) for the project.
- If the research emphasis changes in a major way after prospectus approval, a new prospectus should be presented and submitted.
- There is no formatting criteria, but the main sections should include:
 - **Title:** Must contain good "retrieval" words.
 - **Introduction:** Includes justification and objectives.
 - **Methods:** Experimental design, description of study site, etc.
 - **Hypothesis**
 - **Pertinent Literature:** Must include sufficient references to assure advisory committee members that student is familiar with the proposed research area.
 - **Anticipated Costs:** Must include information which will alert the advisory committee members if any expensive equipment or supplies will be needed that are not already available and how such expenditures are to be met.
- Give one copy of the prospectus to each member of the committee for review.
- Schedule a conference room with the graduate program manager for this presentation.
- Bring the Prospectus Form (located at biology.byu.edu) to the presentation.
- Submit the Prospectus Form completed with all required signatures along with a copy of the prospectus document attached to the graduate program manager.

COMPREHENSIVE ORAL EXAM

- Must be completed at the end of the 3rd semester for MS students and at the end of the 4th semester for PhD students.
- The Oral Exam should be scheduled through the graduate program manager for use of a conference room and tracking purposes.

- The forms required (available at biology.byu.edu) include one cover sheet and an evaluation sheet for each committee member to be distributed before the examination begins. All members of the committee must sign their individual forms as well as the bottom of the cover sheet. All forms should be submitted to the graduate program manager after the oral exam is complete.
- The Oral Exam will provide an opportunity for the advisory committee to probe in greater depth any issues they deem relevant to the student's research project. This may include coverage of previous coursework, although this will normally be a minor part of the examination.
- Examiners should evaluate the student on total performance and not merely on those questions that he/she asks.
- There are 3 possible grade options for the Oral Exam:
 - **Pass without Qualifications:** The student receives a 5 (outstanding) or 4 (adequate) to pass the exam without qualifications. No further work is required by the student unless defined by the committee.
 - **Pass with Qualifications:** The student receives a 3 (retake portion) and all qualifications will be listed for the student to review and complete. The student must reschedule the exam in order to retake that portion of the exam. Rescheduling should be done with the graduate program manager. If the exam must be retaken, the student must submit another Oral Exam Form (cover sheet with evaluations).
 - **Fail:** If the student receives a 2 (marginal) or 1 (poor) grade, the decision of what to do ultimately lies with the committee. There are 2 options: 1) Terminate the student or 2) Reconvene at a later date (typically one semester or year later) to retake the exam.

MS PROGRAM

- Committee members will examine students on basic biological principles and concepts related to the focal area of study as well as any material indicated on the Program of Study. Coursework is a larger part of the MS Oral Exam than for PhD students.
- To prepare, students must meet first with his/her major advisor as well as each committee member for guidance on format and scope.

PHD PROGRAM

- For PhD students, the Oral Exam is comprised of 3 separate requirements:
 - 1) Grant proposal
 - 2) Literature review
 - 3) Oral exam
- Prior to scheduling the Comprehensive Oral Exam, each student should set aside 4 to 6 weeks to complete the first draft of the following documents:
 - **Grant Proposal:** This should be a complete research proposal prepared according to a pre-specified format (e.g., the NSF Dissertation Improvement Program guidelines). A budget and justification for all expenses should be included. It is intended that the

grant proposal will be submitted to the NSF, NIH, or whatever institute is offering the grant.

- **Literature Review:** This should be a thorough review and reading of literature of the major theme(s) of the dissertation research. This will give the student flexibility to more fully develop ideas and to consider alternative or controversial points-of-view. The assignment permits the student to demonstrate an in-depth mastery and synthesis of the relevant literature including formats and page limits. If done well, this document may also be submitted to a journal or used as a chapter in the final dissertation.
- The major advisor should read both documents and return edited copies to the student for revision. After revision, both documents should be sent to all members of the advisory committee. A final revision will be completed after suggestions are made by the committee. Scheduling the Oral Exam should be done at this point with the graduate program manager.
- Any weaknesses in project design or protocol may result in the committee's recommendation for further revisions and the issues may be revisited at the committee's discretion.

DEFENSE OF RESEARCH

- Research should be defended when it is 75-90% complete.
- It must be scheduled through the graduate program manager.
- The presentation to the advisory committee should consist of the research progress for approval of approach, work completed, and proposed work to still be finished.
- Submit completed Defense of Research Form (available at biology.byu.edu) to the graduate program manager.

FINAL THESIS/DISSERTATION DEFENSE

SCHEDULING

- Scheduling of the defense must be completed at least 2 weeks prior to defense.
- The defense must be officially scheduled by filling out ADV Form 8c. The form should be signed by each committee member, the graduate coordinator/chair, and then submitted to the graduate program manager.
- Schedule the defense in a conference room with the graduate program manager.
- The thesis/dissertation draft should be emailed to the advisory committee and to the graduate program manager upon submission of the Scheduling Form. The committee should review the draft for content, and the graduate program manager will review the formatting.
- See Thesis/Defense Procedures below for more information on formatting and submitting the final draft.
- A picture to include on an advertising flyer should also be emailed to the graduate program manager when the Scheduling Form is submitted.

EXPECTATIONS

- The student and all committee members must be present for the defense. If an accommodation needs to be made, then 1 committee member can participate via high quality video conference. This option does not apply to the student or the committee chair. The Committee Absence Approval Form (available at biology.byu.edu) should be submitted 2 weeks prior to the defense, along with the Scheduling Form.
- There are 2 parts to the Final Defense: First, the student will present their thesis/dissertation. Second, the advisory committee will question the student.
- The thesis/dissertation must be presented to the advisory committee in a public meeting. Although the defense is open to the public, only members of the advisory committee may question the student and vote on his/her performance. After the presentation, all participants are invited to exit while the committee proceeds with an oral examination on the research material. The final discussion and voting will follow by the advisory committee.
- For the presentation, the student should provide a well-thought-out, well-organized, and clear summary of the student's work, possibly including the following:
 - An explanation of how the current work relates to the student's discipline.
 - The rationale behind the project in the context of available literature.
 - An explanation of the student's intellectual contribution to any or all research projects they were working on in their advisor's lab and a description of how the student's work fits into the broader research conducted in this lab.
 - The questions or issues the current work was designed to address.
 - The way the design, method, and/or approach addressed those questions.
 - The analysis of data gathered.
 - The results, outcomes, final products, or performance.
- The final defense should also include the following:
 - An interpretation of results, findings, contributions, insights, and conclusions and their significance. What does this work add to existing knowledge?
 - A discussion of implications the work suggests for future research or creative endeavor.
 - A discussion of any applied or clinical implications suggested by the work.
 - Thoughtful, well-founded responses to all questions the committee members might ask.
- The oral exam of the thesis/dissertation defense should be demanding and fair. Examination questions should be carefully framed to require a grasp of discipline essentials and should require the ability to analyze and synthesize. Students should demonstrate currency in the field, thorough analysis of the questions or problems posed, and synthesis of knowledge in the discipline, all at a level appropriate for the degree to be awarded. Students must demonstrate a sound understanding of their work and its implications.

COMMITTEE DECISIONS

- Graduate Studies will send over the paperwork required for the Final Defense approximately a week prior to the defense.

- ADV Form 9 (individual committee member evaluations) and ADV Form 10 (report of committee action) should be submitted to the graduate program manager immediately following the defense.
- There are 4 committee voting options for the final defense:
 - **Pass:** All members of the committee find the thesis/dissertation ready to publish and the candidate's level of knowledge sufficient. No further work is required.
 - **Pass with Qualifications:** The committee may require minor revisions of the thesis/dissertation, strengthening of the candidate's preparation in subject matter areas, or both. All qualifications should be listed on ADV Form 10 or attached as a separate document. Once the student has completed all qualifications, the advisor should sign off on the same form stating that the qualifications are complete.
 - **Recess:** A majority vote is not necessary to recess an examination. If 2 or more committee members vote to recess, then the examination is recessed. The committee will provide a detailed summary to the student, the department, and to Graduate Studies of the expectations for improvement in the subject matter, and/or changes required in the thesis/dissertation before the examination will be reconvened. With the approval of the graduate committee, the candidate will reschedule a second and final examination no sooner than one month later. It must be again formally scheduled through the graduate program manager and the university using ADV Form 8c.
 - **Fail:** A majority vote is not necessary to fail an examination. If 2 or more committee members vote to fail, then the examination is failed. The student is terminated from the graduate program. ADV Form 10 should be submitted to Graduate Studies and should include the reasons for the committee's decision.

GRADUATION

- Graduation applications must be submitted prior to submission of the Scheduling Form (ADV Form 8c).
- All graduation applications are submitted online:
 - Go to my.byu.edu > School (under Campus Links) > Apply for Graduation.
- A current ecclesiastical endorsement must be on file with the Honor Code Office for the semester in which you intend to graduate.
- You must enroll for 2 credit hours during the final semester prior to graduation.

THESIS/DISSERTATION PROCEDURES

THESIS/DISSERTATION OPTIONS

- The thesis/dissertation requirement may be fulfilled by completing one of the following options:
 - 1) Writing a regular research thesis/dissertation paper using formatting guidelines found above.
 - 2) Submitting published journal article(s) in lieu of a regular research paper.
 - A minimum of 1 published article is required for MS students and 3 published articles are required for PhD students.
 - In cases of co-authorship of published journal articles, the student's name must appear as senior author on at least one major paper for either MS or PhD students.
 - The published work must be considered a "full-length" journal article rather than a communication, preliminary note, abstract, or letter to the editor.
 - The journal selected must be one in which major works of the respective field are regularly published.
 - The journal article must be peer-reviewed.
 - The work and length of time necessary to complete the study for publication should not be less than what is ordinarily expected for completing a regular thesis/dissertation in the same conditions.
 - 3) Any combination of the above options that is acceptable to the advisory committee chair and members, as well as to the graduate program manager and department chair.

THESIS/DISSERTATION FORMAT

- Margins: 1-inch margins on all sides
- Font: Should be black, a standard size (12 point for text, including titles and headings, and 10 or 11 point for tables and figures). Use a standard serif typeface, such as Times New Roman. The body should be double-spaced.
- Page numbers: Preliminary pages should be counted and numbered in lower-case Roman numerals. The body of the work should be numbered with Arabic numbers beginning with 1. All pages are to be numbered consecutively in the body and the appendix (do not use letters: 1a, 1b, etc.). See ADV Form 11, "Checklist for Preparing ETD (PDF) for Submission," for more information. The college requires that all theses and dissertations have all pages numbered consecutively, even if selections from published journal articles are used.
- The standard university format for the title page, abstract, and acknowledgement pages should be followed. Templates are found on ADV Forms 11a, 11b, and 11d.

- Thesis/dissertations should also follow the College of Life Sciences formatting guidelines, outlined on form “College of Life Sciences ETD Requirements,” which can be found online at biology.byu.edu.

REVIEW AND APPROVAL PROCEDURES

- Students should submit an electronic copy of their thesis/dissertation to their committee for a content review and to the graduate program manager for a format review no later than 2 weeks prior to the scheduled defense.
- Students will complete a final presentation of their thesis/dissertation to the advisory committee following the procedures listed above under the Final Thesis/Dissertation Defense section.
- After the student has passed the Final Defense or completed any required qualifications, they should then submit the following for approval from the College of Life Sciences Dean's Office (5001 LSB):
 - A hard copy of their final thesis/dissertation draft, as approved by their committee. It should be a one-sided (not double-sided) copy. For assistance printing your thesis/dissertation, contact the graduate program manager.
 - The thesis/dissertation should be formatted according to university and college guidelines.
 - ADV Form 8d, “Approval for Final Dissertation or Thesis,” with all required signatures (except for the college dean's).
 - College Thesis & Dissertation Submission Form (available at biology.byu.edu.)
- For more info on the college approval process, see their published document “College Thesis & Dissertation Approval Process” (available online).
- Once the college has approved the thesis/dissertation, upload the thesis/dissertation through the etd.byu.edu website.

ELECTRONIC THESIS/DISSERTATION SUBMISSION

- All thesis/dissertations will be submitted electronically.
- After all content has been approved by the college, the student should convert the document into a PDF using Adobe Acrobat Pro (found on all campus computers). Add bookmarks for headings listed in the Table of Contents (all preliminary pages, headings, and subheadings), and save.
- Upload the PDF document to the ETD website (etd.byu.edu) and submit for approval.
 - Both the graduate program manager and the college will approve the work—continue to check your email throughout the day to see if revisions are needed.
 - After the department and college have approved the document, your ETD status will display “Grad Office Review.”
- MS students: Take ADV Form 8d to Graduate Studies (located in 105 FPH).
- PhD students:
 - 1) Upload your dissertation to the Proquest website. See ADV Form 13 for complete instructions.

- 2) Complete the Survey for Earned Doctorates. See ADV Form 14 for complete instructions.
- 3) Take ADV Form 8d to Graduate Studies (located in 105 FPH).

PRINTING & BINDING

- If you would like to have your thesis/dissertation printed and bound, go to gradworksonline.com.
- The department doesn't require a bound copy, but your advisor might.

FINANCIAL ASSISTANCE

DEPARTMENTAL FUNDING GUIDELINES

Graduate students accepted to a program in the Department of Biology are awarded certain financial assistance benefits as outlined below and in individual acceptance letters. The following guidelines may be altered each year and do not guarantee future awards. In addition to a tuition award, students are also given Research or Teaching Assistantships in the department according to the schedule below. These positions are not considered “no strings attached” stipends, awards, or guaranteed benefits; they are for the student to work in a lab or to assist a professor in a class. Students are expected to earn the money received during employment by putting in the appropriate hours.

All financial assistance benefits are contingent on satisfactory progress as evaluated by the committee advisor in the biannual evaluations.

TUITION BENEFITS

MS STUDENTS

- Master’s students are awarded a tuition scholarship for up to \$1000 for 2 of the 3 semesters, for a maximum of 2 years. Generally this scholarship is awarded for fall and winter tuition. If a student is charged less than \$1000 in tuition based on the number of credits he/she is enrolled in, the award will only be up to the amount due for tuition.

PHD STUDENTS

- Doctoral students are awarded a full tuition scholarship for all semesters, up to a maximum of 5 years. The amount awarded will be based on the number of credit hours the student is enrolled in. Students on an external fellowship grant providing tuition assistance will only be awarded a department tuition scholarship once they are no longer receiving external support.

SUPPLEMENTAL AWARDS

PHD STUDENTS

- Doctoral students will receive a supplemental award to help offset costs of living each semester he/she is enrolled for a maximum of 5 years.
- This award will typically be disbursed as a stipend.
- Award amounts:
 - Single students: \$165/semester
 - Married students: \$905/semester

TEACHING OR RESEARCH ASSISTANTSHIPS

MS STUDENTS

- MS students are guaranteed 4 semesters of TA/RA positions, as long as additional semesters of funding continue to be approved by the committee chair and graduate program manager. 3 semesters must be Teaching Assistantships and 1 can be a Research Assistantship. It is expected that faculty advisors will provide external funding for Spring and Summer terms. When that isn't possible, then the department will help fund an RA. When you will do either a TA or RA will be determined by your committee. Exceptions for the 4 semesters can be made under extenuating circumstances.
- Stipend amounts:
 - 1st-year students: \$5378/semester
 - 2nd-year students: \$5600/semester

PHD STUDENTS

- PhD students are guaranteed a TA or RA assistantship year-round, as long as additional semesters of funding continue to be approved by the committee chair and graduate program manager. 7 semesters must be Teaching Assistantships and the rest can be Research Assistantships (usually 8 semesters). When you will do either a TA or RA will be determined by your committee. Students will not receive an additional stipend if they teach a course instead of TA for a course as the department views this as an opportunity for teaching experience. Please contact the graduate program manager for more details.
- Stipend amounts:
 - Before Oral Exam is passed: \$7500/semester
 - After Oral Exam is passed: \$8000/semester

TRAVEL FUNDS

- Graduate students are awarded up to \$800 per academic year for travel. These funds are only available to students traveling to present at a conference.
- The money can only be applied to expenses involving travel to/from the area (bus, car, taxi, or airfare), hotel lodgings, and conference fees. No department funds will be used for food or other miscellaneous charges.
- These funds are not guaranteed. They are available on a first come, first serve basis. To apply for the funds, submit a Student Travel Authorization form to the department financial secretary at least 10 days prior to the trip.
- To receive reimbursement after the trip, the student must submit a Travel Reimbursement Form with all receipts attached to the financial secretary.
- No cash advances will be granted. If a student cannot use personal funds, a faculty travel or purchasing card may be used. This card should be obtained from the committee advisor.

SCHOLARSHIP AWARDS

- There are a variety of on-campus scholarships. The Department of Biology encourages its graduate students to seek additional funding as needed to continue making satisfactory progress in the program.
- Department Scholarships
 - D. Elden Beck Scholarship: This scholarship is awarded to MS students who will be starting their second-year in the program and who are studying some aspect of natural history. An application link will be sent to MS students during Winter semester.
- Graduate Studies Assistantships
 - High Impact Doctoral Research Assistantship (HIDRA): This award program is designed for faculty to recruit non-BYU originating PhD graduate students. Faculty members are encouraged to use the HIDRA program to recruit high-quality applicants. Applicants are awarded \$30,000 per academic year for a maximum of 3 years. The faculty member and the applicant submit a joint proposal to Graduate Studies. Applications are due January 15th. For detailed info, go to gradstudies.byu.edu.
 - Graduate Mentoring Assistantship: This assistantship gives graduate students the opportunity to mentor undergraduates. Funding is limited to a maximum of \$15,000. Proposals are initiated by faculty and submitted to the college dean typically in December, who will then evaluate all proposals received and submit them to Graduate Studies no later than January 15th. For detailed info, go to gradstudies.byu.edu.
- Graduate Student Society Awards
 - Research Presentation Award (RPA): RPAs are intended to enable graduate students to travel to important conferences within their discipline in order to present original research. Awards average \$400. Applications are accepted twice a year; deadlines are generally in October and February. Applications are submitted online at gss.byu.edu.

EXTERNAL FUNDING GUIDELINES

External funding is any funding outside of regular department funding. This could be a department or college scholarship, the Graduate Mentoring Assistantship, Fulbright Scholars, the HIDRA award, etc.

The department will treat external funding as above and beyond what a regular student would receive. Students can choose to use external money to “buy-out” TA positions, allowing the student to focus on research. With this option, the student is not required to work as a TA, but will fund an RA for themselves. In this option, if the external funds don't cover the full wage amount appropriate for the student, the department will match funds up to the appropriate wage. If all required TA positions have been completed, the student will receive a department funded RA on top of the external funding.

If external funding specifies that tuition will be covered, the department will not consider that above and beyond. The department will not pay for tuition while the external funding source is doing so.

OFFICE ALLOCATIONS

OFFICE SPACE

Currently there are 2 types of spaces allocated for graduate student use: office space with individual carrels and write-up rooms. Please be aware that you may be asked to move for new faculty, post-docs, etc. We will assign you space; we do our best to listen to requests for space but we are limited. In addition, we follow a model of having cohorts in close space. If you desire an area that is quieter, then we invite you to visit the Harold B. Lee library.

OFFICES W/DESK CARRELS

- These offices are for MS students and for PhD students before they have passed their Oral Exams.

WRITE-UP ROOMS

- These offices house 2 large desks each.
- They are available for PhD students who have passed their Oral Exams (including completing any qualifications), so they have space where they can focus on writing their dissertation.
- The space is not guaranteed. It is on a first come, first serve basis.
- PhD students may be sharing the office with a postdoc or visiting faculty.

KEEPING SPACE CLEAN

- Graduate students are responsible for their individual desks.
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COURSES OFFERED

CURRENT BIOLOGY GRADUATE COURSES

Course Title	Credit Hours*	Semester Taught	
Bio 503	Research Orientation	1.0	Fall
Bio 510	Biological Systematics and Curation	3.0	Fall, even years
Bio 511	Lichenology	3.0	On demand
Bio 512	Angiosperm Phylogeny	3.0	On demand
Bio 517	Publishing in Peer-Reviewed Journals	2.0	Winter, odd years
Bio 520	Symbiosis	3.0	Winter, even years
Bio 525	Animal Disease, Biosecurity, and Zoonoses	3.0	Winter
Bio 530	Advanced Genetic Analysis	3.0	Fall, odd years
Bio 541	Aquatic Entomology	4.0	Fall, even years
Bio 550	Behavioral Ecology	3.0	Winter, odd years
Bio 555	Evolutionary and Ecological Modeling	2.0	Winter, even years
Bio 556	Limnology	3.0	On demand
Bio 557	Stream and Wetland Ecology	4.0	Fall, odd years
Bio 559R	Advanced Topics in Ecology and Evolution	1.0-6.0	On demand
Bio 560	Population Genetics	4.0	On demand
Bio 581	Biological Applications in Electron Microscopy	3.0	Winter
Bio 589R	Advanced Science In-Service	1.0-5.0	Summer
Bio 640	Phylogenetic Systematics	4.0	Fall, odd years
Bio 641	Molecular Evolution	4.0	Fall, even years
Bio 652	Evolutionary Ecology	3.0	Winter, even years
Bio 653	Community and Ecosystem Ecology	3.0	Winter, odd years
Bio 654	Speciation and Phylogeography	3.0	Fall, even years

Bio 664	Bioinformatics and Data Analysis 1	4.0	Fall, even years
Bio 665	Bioinformatics and Data Analysis 2	2.0	Winter, odd years
Bio 676	University Teaching 1: Advanced Pedagogical Methods	3.0	Fall, odd years
Bio 677	University Teaching 2: Instructional Design	2.0	Winter, even years
Bio 678	University Teaching 3: Mentored Classroom Practicum	2.0	Fall, Winter, Spring even, Summer even years
Bio 679R	Advanced Topics in Science Education	3.0	Fall
Bio 681R	Electron Microscopy Laboratory	1.0-6.0	On demand
Bio 691R	Graduate Seminar	0.5	Fall, Winter
Bio 694R	Special Problems in Biology	1.0-6.0	On demand
Bio 695R	Practicum in Biology Teaching	4.0-8.0	Winter
Bio 699R	Master's Thesis	1.0-9.0	On demand
Bio 799R	Doctoral Dissertation	1.0-9.0	On demand

*Courses that have a range of credit hours listed are courses that vary in the amount of credits students can take each semester.

GRADUATE FORMS

DEPARTMENT FORMS

Form	Name	Purpose
D.1	Approval of Prospectus	Obtain signatures to verify committee's approval of proposed research project.
D.2a/2b form member	MS/PhD Oral Exam	Obtain signatures of committee members on main to confirm Pass/Fail grade. Each committee must complete the evaluation form.
D.3	Defense of Research of	Obtain signatures of committee to validate adequacy project for degree.
D.4a & 4b	MS/PhD Graduate Checklist Projected	Student receives checklist as a progress report. dates and completion dates should be similar.

UNIVERSITY FORMS

Form	Name	Purpose
ADV 1	Request for Interdisciplinary Graduate Study	Allows students to have a committee chair in a different department (non-biology faculty).
ADV 3	Program of Study	Outlines courses to be taken by student, committee members, and any transfer credits from MS to apply to PhD.

ADV 3b committee	Program of Study Change	Allows student to change courses or members.
ADV 5 of	Leave of Absence	Allows the student to leave the program for a period of time.
ADV 6	Request for No Cost/Credit Religion Course	Allows the student to enroll in a religion course without incurring extra tuition costs.
ADV 8	Graduation Deadlines	Lists graduation deadlines for upcoming terms.
ADV 8c	Scheduling of Final Oral Exam	Used to schedule thesis or dissertation defense.
ADV 8d student	Approval of Final Dissertation/Thesis	After defense and thesis is approved, the student completes this form to verify approval of committee and release agreement.
ADV 8e public.	Request to Secure Dissertation/Thesis	Used to limit access of dissertation/thesis from public. Usually used for works involving a patent.
ADV 8f	Copyright Information pertaining to Dissertations, Theses, and Selected Projects	Information about copyright registration.
ADV 11	Minimum Standards for Submitting	Outlines the format required by the university.

Dissertations/Theses

ADV 11a requirements.	Sample Preliminary Pages	Demonstrates the university format
ADV 11b Replaces	Thesis Writeable Preliminary Pages	Used by MS students as the preliminary pages. student information in highlighted areas.
ADV 11d Replaces	Dissertation Writeable Preliminary Pages	Used by PhD students as the preliminary pages. student information in highlighted areas.
ADV 12a	Student Thesis Submission Checklist	Helps students track progress in submission process.
ADV 12b	Student Dissertation Submission Checklist	Helps students track progress in submission process.
ADV 13	Submission to the UMI Website	Instructions for PhD students on submitting dissertation to UMI website.
ADV 14	Survey of Earned Doctorates	Directions for completing the Survey of Earned Doctorates (SED) for PhD students.
GS 1	Guide for Applying to Graduate Studies	Printed document to assist in applying.
GS 2	Application for Graduate Study Checklist	Helps students track progress in application process.

GS 4	Graduate Application Deadlines	Application deadlines for programs at BYU
GS 6 & 6a minimum	Application to Resume Graduate Study	Used by students who do not meet the registration requirement.
OGS 2	Petition for Exception	Department requesting an exception on behalf of the student. Most commonly used for external committee members.

MS DEGREE CHECKLIST

Event	Deadline	Form*	Projected Date	Completion Date
Program of Study	End of 1st semester	U.3	_____	_____
Prospectus	End of 2nd semester	D.1	_____	_____
Oral Exam	End of 3rd semester	D.2a	_____	_____
Defense of Research	When research is 75-90% complete	D.3	_____	_____

Application for Graduation	During 1st month of final semester	Online	_____	_____
Scheduling of Defense	At least 2 weeks before defense	U.8c	_____	_____
Thesis Defense	At least 2 weeks following scheduling of thesis	U.9 & U.10	_____	_____
ETD Submission	Within one week following defense	U.8d	_____	_____

Form*:

U = University Form: located at <http://graduatestudies.byu.edu/advisement-forms-adv>

D = Department Form: located on the Graduate Student board in the hallway across from 403 WIDB

NOTE: Plan to finish each step before the absolute deadline. **Do not plan to hold any committee meeting or any examination at any time when school is not in session.** If you wish to schedule an examination during spring or summer terms, you are responsible for making sure that your committee members are available to attend.

PHD DEGREE CHECKLIST

Event	Deadline	Form*	Projected Date	Completion Date
Program of Study	End of 2nd semester	U.3	_____	_____
Prospectus	End of 3rd semester	D.1	_____	_____
Oral Exam & NSF Grant Proposal	End of 4th semester	D.2b	_____	_____
Defense of Research	When research is 75-90% complete	D.3	_____	_____
Application for Graduation	During 1st month of final semester	Online	_____	_____
Scheduling of Defense	At least 2 weeks before defense	U.8c	_____	_____
Dissertation Defense	At least 2 weeks following scheduling of dissertation	U.9 & U.10	_____	_____

ETD Submission	Within one week following defense	U.8d	_____	_____
UMI Submission	Within one week following ETD submission	U.13	_____	_____
Doctoral Survey	Within one week following ETD submission	U.14	_____	_____

Form*:

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