# **BOTANY, MS**

Graduate students in Botany work with faculty and staff on a range of projects in plant biology at all levels of organization – from molecules, through cells and organs, to populations, communities, and lineages of organisms. Major research areas include evolution and systematics; molecular, cellular, and developmental biology; plant biology; biochemistry; and ecology. We also provide advanced instruction and opportunities for research in phycology, bryology, mycology, ethnobotany, paleoecology, conservation and restoration ecology, taxonomy, genetics, and physiology. Increasingly, graduate student projects encompass two or more of these categories.

Students interested in fields bordering botany will find rich opportunities for coursework, collaborative research, and seminars in many other departments and schools such as Bacteriology, Biochemistry, Chemistry, Engineering, Entomology, Forest and Wildlife Ecology, Genetics, Geography, Geoscience, Integrative Biology, Physics, Plant and Agroecosystem Sciences, Plant Breeding/Plant Genetics, Plant Pathology, Statistics, Soil Science, and the Nelson Institute for Environmental Studies. Interdisciplinary work is encouraged.

Graduate study in the Department of Botany requires a combination of advanced coursework, participation in seminars, and original research. Course requirements follow one of four pathways: general botany; ecology; evolution; or molecular, cellular, and developmental biology. The department encourages students to pursue independent research soon after arriving. In consultation with the faculty advisor, each student selects a pathway that includes courses and research topics related to their interests as well as training in the array of techniques and approaches needed to pursue research.

# ADMISSIONS

# ADMISSIONS

Please consult the table below for key information about this degree program's admissions requirements. The program may have more detailed admissions requirements, which can be found below the table or on the program's website.

Graduate admissions is a two-step process between academic programs and the Graduate School. *Applicants must meet the minimum* requirements (https://grad.wisc.edu/apply/requirements/) of the *Graduate School as well as the program(s).* Once you have researched the graduate program(s) you are interested in, apply online (https:// grad.wisc.edu/apply/).

Requirements	Detail
Fall Deadline	December 1
Spring Deadline	The program does not admit in the spring.
Summer Deadline	The program does not admit in the summer.
GRE (Graduate Record Examinations)	Not required.
English Proficiency Test	Refer to the Graduate School: Minimum Requirements for Admission policy: https:// policy.wisc.edu/library/UW-1241 (https:// policy.wisc.edu/library/UW-1241/).

Other Test(s) (e.g.,	The GRE subject test in Biology or in Cell and
GMAT, MCAT)	Molecular Biology is not required.
Letters of	3
Recommendation	
Required	

Please submit all your application materials before the fall deadline to ensure full review of your application. Applications submitted after the above deadline through April 15 will be considered if space is still available. Space for students is typically limited by the department's ability to provide financial support (https://botany.wisc.edu/financial-support/). To check if space is available, please email: gradinfo@botany.wisc.edu or contact faculty (https://botany.wisc.edu/botany-faculty/) with whom you are interested in working to ask if they have graduate student funding available.

The Department of Botany considers applicants for graduate degrees who surpass the minimum admissions requirements of the Graduate School. Neither the general Graduate Record Exam (GRE) nor the Graduate Record Exam subject test in Biology or in Cell and Molecular Biology is required. Admission is based on the applicant's statement of purpose, undergraduate record, letters of recommendation, experience in research, and the interests they share with one or more potential faculty advisors.

Courses may be required to address deficiencies in the following: GENETICS 466 Principles of Genetics or equivalent;CHEM 103 General Chemistry I and CHEM 104 General Chemistry II or equivalent; CHEM 341 Elementary Organic Chemistry or equivalent; a physics course including electricity and light; one semester of statistics; one semester of calculus. Contact the department for more information.

## FUNDING

# FUNDING GRADUATE SCHOOL RESOURCES

The Bursar's Office provides information about tuition and fees associated with being a graduate student. Resources to help you afford graduate study might include assistantships, fellowships, traineeships, and financial aid. Further funding information is available from the Graduate School. Be sure to check with your program for individual policies and restrictions related to funding.

## **PROGRAM RESOURCES**

Financial support is available to qualified graduate students in the form of teaching, research, and project assistantships and fellowships. Typically, there are approximately 35 graduate students who hold assistantships or fellowships in the botany department. In addition, graduate students are eligible for a number of intradepartmental awards and grants.

Graduate students who have a teaching, research, or project assistantship of at least a 33% appointment for a fall or spring term are eligible to receive remission of full tuition. Fellowships or traineeships that are payrolled through the university and that carry stipends equivalent to at least a 33% research assistantship also qualify for remission of nonresident tuition. Tuition remission is conditionally awarded at the start of the semester based on the expectation that actual earnings during the semester will be at least 33% of the full-time rate. All students pay segregated fees. The only exception is that fellowships paid through the Graduate School have segregated fees waived in addition to tuition. Assistantships and fellowships also provide eligibility for an excellent health insurance program, an extremely valuable benefit that provides single or family coverage that is more comprehensive than individuals can usually purchase on their own.

### **TEACHING ASSISTANTSHIPS**

The most common source of support is a teaching assistantship. Historically, stipend rates for teaching and project assistants are governed by the Teaching Assistants' Association (TAA) bargaining unit.

To receive a teaching assistantship, candidates for admission must meet the following requirements:

- evidence (usually from the undergraduate transcript) of an appropriate background in the relevant subject matter of the course(s) to which appointment is being considered;
- evidence (usually from letters of recommendation or verbal communication) of the candidate's potential as a teaching assistant;
- an undergraduate GPA of 3.0 or above (on a 4.0 scale); and
- for students whose native language is not English, evidence of competence in spoken English through the SPEAK test that is administered by the UW. International applicants should note that a TA appointment is not normally possible during the first year of graduate study.

Current students who apply for their first teaching assistantship are also subject to the above criteria, as well as their performance as a graduate student. Reappointment as a teaching assistant depends upon satisfactory progress as a graduate student, satisfactory performance as a teaching assistant, and completing TA Training.

Teaching assistants may be eligible for University teaching awards (https:// grad.wisc.edu/taawards/), including the UW-Madison Early Excellence in Teaching Award, UW-Madison Exceptional Service Award, UW-Madison Innovation in Teaching Award, UW-Madison Capstone PhD Teaching Award, and the College of Letters & Science Teaching Fellow.

## **RESEARCH OR PROJECT ASSISTANTSHIPS**

Research and project assistantships are made possible by grants awarded to individual professors for particular research programs. Recipients are selected by the individual professor concerned. Availability of research and project assistantships varies.

## ADVANCED OPPORTUNITY FELLOWSHIPS

Advanced Opportunity Fellowships (AOF) are granted to the UW– Madison's Graduate School by the State of Wisconsin and are combined with other graduate education funds to support the recruitment and retention of highly qualified students in UW–Madison graduate programs. Fellowships are competitive and merit-based. AOF fellowships are paid through the Graduate School by the College of Letters & Science's **Community of Graduate Research Scholars (http://ls.wisc.edu/ current-students/graduate-students/cgrs/)** (C-GRS) program.

## **EXTERNAL FELLOWSHIPS**

Fellowships from professional societies and outside agencies provide another important source of aid for which students may apply either before or after commencing graduate work at UW–Madison. If necessary, external fellowships can often be supplemented with university funds up to prevailing university fellowship rates.

All qualified students who are U.S. citizens, nationals, or permanent resident aliens of the U.S. are urged to apply to the National Science

Foundation for the pre-doctoral fellowship competition. Students apply directly to NSF; the closing date is usually in early November. Please check the NSF website (http://www.nsf.gov/) for the application instructions and deadline.

# INTRADEPARTMENTAL FELLOWSHIPS AND AWARDS

For more information on Intradepartmental Fellowships and Awards, please see the latest descriptions (https://botany.wisc.edu/financial-support/) on the botany website.

# REQUIREMENTS

# MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (https:// guide.wisc.edu/graduate/#requirementstext) and policies (https:// guide.wisc.edu/graduate/#policiestext), in addition to the program requirements listed below.

# MAJOR REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### Mode of Instruction Definitions

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

# CURRICULAR REQUIREMENTS

Requirement	t Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	30 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/ UW-1244 (https://policy.wisc.edu/library/UW-1244/).

Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https:// policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/ library/UW-1203/).
Other Grade Requirements	
and	A written thesis or research report based on work conducted in a formal research course and a final oral exam are required of all students who expect to continue for the PhD degree. All master's theses must be deposited at Memorial Library.
	Students who wish to terminate their graduate studies at the master's level may submit a literature review instead of a thesis.
Language Requirements	No language requirements.

### **REQUIRED COURSES**

Code Title Botany <sup>1</sup>	Credits
A minimum of 6 credits in graduate-level BOTANY courses must be completed at UW–Madison. <sup>1</sup>	6
Seminar	
Two (2) seminar courses (at least one in BOTANY; see full list of seminars below).	2-4
Committee Assigned	
Courses assigned by the Academic Advisory Committee and/or the student's MS committee.	0-9
Research	
See full list of research courses below.	1-12
Pathway <sup>2</sup>	
Courses required for their selected pathway (see below).	12-18
Total Credits	30

<sup>1</sup> Seminars and research credits do not count toward the 6 credits in botany (BOTANY (https://guide.wisc.edu/courses/botany/)).

<sup>2</sup> These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

A minimum of 30 credits in natural sciences (undergraduate and graduate program courses combined) is required.

Each graduate student in botany selects one of the following pathways:

### General Botany Pathway<sup>1</sup>

Complete one course from at least six of the following seven categories:

Code	Title	Credits
Genetics		
BOTANY/ PL PATH 563	Phylogenetic Analysis of Molecular Data	3
Biochemistry, Ce	ll or Molecular Biology	
BOTANY/ BIOCHEM 621	Plant Biochemistry	3

#### Plant Physiology or Plant Developmental Biology

BOTANY 500	Plant Physiology	3-4
Cryptogamic Botany		
BOTANY/ GENETICS/M M & I/ PL PATH 655	Biology and Genetics of Fungi	3
Plant Anatomy or M	lorphology	
BOTANY 300	Plant Anatomy	4
BOTANY 305	Plant Morphology and Evolution	4
Ecology		
BOTANY 802	Physiological Plant Ecology	3
<b>Evolution or System</b>	natics	
BOTANY/ENTOM/ GENETICS/ ZOOLOGY 820	Foundations of Evolution	2

<sup>1</sup> These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

#### **Ecology Pathway**<sup>1</sup>

Complete a minimum of five courses as follows:

Code Ecology	Title	Credits
Complete at least thr ecology; example incl	ee courses (minimum 9 credits) in udes:	
BOTANY/ F&W ECOL 455	The Vegetation of Wisconsin	4
Evolution		
Complete one course	in evolution; example includes:	
BOTANY/ENTOM/ GENETICS/ ZOOLOGY 820	Foundations of Evolution	2
Elective		
cryptogamic botany;	in any of the following: systematics; biochemistry, cell or molecular ogy or plant developmental biology; phology; or genetics.	
BOTANY/ENTOM/ GENETICS/ ZOOLOGY 820	Foundations of Evolution	2
BOTANY/ GENETICS/M M & I/ PL PATH 655	Biology and Genetics of Fungi	3
BOTANY/ BIOCHEM 621	Plant Biochemistry	3
BOTANY 500	Plant Physiology	3-4
BOTANY 300	Plant Anatomy	4
BOTANY 305	Plant Morphology and Evolution	4
BOTANY/ PL PATH 563	Phylogenetic Analysis of Molecular Data	3

<sup>1</sup> These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names

do not appear in the Graduate School admissions application, and they will not appear on the transcript.

#### **Evolution Pathway**<sup>1</sup>

Complete a minimum of five courses, at least one from each of the following:

Code	Title	Credits
Evolution		
BOTANY/ENTOM/ GENETICS/ ZOOLOGY 820	Foundations of Evolution	2
Systematics or Cryp	otogamic Botany	
BOTANY/ GENETICS/M M & I/ PL PATH 655	Biology and Genetics of Fungi	3
Population or Quan	titative Genetics	
GENETICS 633	Population Genetics	3
Ecology		
BOTANY/ F&W ECOL/ ZOOLOGY 460	General Ecology	4
Elective		
	the following: biochemistry, cell or Int physiology or plant developmental Dmy or morphology.	
BOTANY/ BIOCHEM 621	Plant Biochemistry	3
BOTANY 500	Plant Physiology	3-4
BOTANY 300	Plant Anatomy	4
BOTANY 305	Plant Morphology and Evolution	4

<sup>1</sup> These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

# Molecular, Cellular, and Developmental Biology (MCDB) Pathway $^1$

Complete a minimum of five courses, at least one from each of the following:

Code	Title	Credits
Plant Anatomy or M	lorphology	
BOTANY 300	Plant Anatomy	4
Biochemistry, Cell o	or Molecular Biology	
BOTANY/ BIOCHEM 621	Plant Biochemistry	3
Plant Physiology		
BOTANY 500	Plant Physiology	3-4
<b>Plant Development</b>	al Biology or Genetics	
BOTANY/BIOCHEM/ GENETICS 840	Regulatory Mechanisms in Plant Development	3
Elective		
	in any of the following: ecology; n; or cryptogamic botany.	
BOTANY 802	Physiological Plant Ecology	3

BOTANY/ENTOM/	Foundations of Evolution	2
GENETICS/		
ZOOLOGY 820		
BOTANY/	Biology and Genetics of Fungi	3
GENETICS/M M & I/		
PL PATH 655		

<sup>1</sup> These pathways are internal to the program and represent different curricular paths a student can follow to earn this degree. Pathway names do not appear in the Graduate School admissions application, and they will not appear on the transcript.

### **Seminar Course Options**

Seminal Course	•	
Code	Title	Credits
BOTANY/ATM OCN/ CIV ENGR/ ENVIR ST/GEOSCI/ ZOOLOGY 911	Limnology and Marine Science Seminar	1
BOTANY/ PL PATH 930	Seminar-Mycology	1
BOTANY 940	Seminar in Plant Systematics and Evolution	1
BOTANY 950	Seminar-Plant Ecology	1
BOTANY 960	Seminar-Plant Physiology	1
BOTANY/ATM OCN/ ENVIR ST/ F&W ECOL/ GEOG/GEOSCI/ ZOOLOGY 980	Earth System Science Seminar	1
ENTOM 901	Seminar in Organismal Entomology	1
GENETICS 670	Seminar in Clinical Cytogenetics	1
GENETICS 672	Seminar in Laboratory Operations and Quality Control	1
GENETICS 673	Seminar in Clinical Cytology	1
GENETICS/AN SCI/ DY SCI 951	Seminar in Animal Breeding	1
GENETICS 993	Seminar in Genetics	O-1
GEOG 900	Seminar in Geography	1-3
GEOG 901	Seminar in Cultural Geography	2-3
GEOG 918	Seminar in Political Geography	2-3
GEOG 920	Seminar in Physical Geography	1-3
GEOG 930	Seminar in People-Environment Geography	2-3
GEOG 970	Seminar in Geographic Information Science	1-3
GEOG/ATM OCN/ BOTANY/ENVIR ST/ F&W ECOL/ GEOSCI/ ZOOLOGY 980	Earth System Science Seminar	1
GEOG/A A E/ ANTHRO/C&E SOC/ HISTORY/LACIS/ POLI SCI/PORTUG/ SOC/SPANISH 982	Interdepartmental Seminar in the Latin-American Area	1-3

GEOG/AFRICAN/	Interdepartmental Seminar in	3
ANTHRO/	African Studies Topics	
ECON/HISTORY/		
POLISCI 983		
SOIL SCI 728	Graduate Seminar	1
ZOOLOGY/	Limnology and Marine Science	1
ATM OCN/BOTANY/	Seminar	
CIV ENGR/		
ENVIR ST/		
GEOSCI 911		
ZOOLOGY/AN SCI/	Seminar in Endocrinology-	O-1
OBS&GYN 954	Reproductive Physiology	
ZOOLOGY 955	Seminar-Limnology	1
ZOOLOGY 956	Seminar-Ecology	1
ZOOLOGY 957	Seminar-Evolution	1
ZOOLOGY 960	Seminar in Cellular Biology	1
ZOOLOGY/	Earth System Science Seminar	1
ATM OCN/		
BOTANY/ENVIR ST/		
F&W ECOL/GEOG/		
GEOSCI 980		
ENVIR ST/	Energy Analysis and Policy Capstone	3
PUB AFFR/		
URB R PL 810	- ·	
ENVIR ST 900	Seminar	1-3
ENVIR ST/ ATM OCN 925	Seminar-Climatology	1-2
ENVIR ST 950	Environmental Monitoring Seminar	2
F&W ECOL/	Introduction to Ecology Research at	1-2
AGROECOL/	UW-Madison	1-2
ATM OCN/		
BOTANY/ENTOM/		
ENVIR ST/GEOG/		
ZOOLOGY 953		
GEOSCI 920	Seminar in Glacial and Pleistocene	1-3
	Geology	
GEOSCI 929	Seminar-Hydrogeology	1-2
GEOSCI 970	Seminar-Geochemistry	2
ATM OCN 900	Seminar-Meteorology	1-2
ATM OCN/	Seminar-Climatology	1-2
ENVIR ST 925		
ATM OCN 965	Seminar-Oceanography	1-2
M S & E 900	Materials Research Seminar	1
M&ENVTOX 800	Seminar	1
PLANTSCI 920	Seminar in Plant Science and	1
	Technology	
PLANTSCI 957	Seminar in Plant Breeding and Plant	1
	Genetics	

#### **Research Course Options**

Code	Title	Credits
BOTANY 699	Directed Study	1-4
BOTANY 698	Directed Study	1-4
BOTANY 990	Research-Phycology	1-12
BOTANY 993	Research: Fungal Biology	1-12
BOTANY 994	<b>Research-Plant Systematics</b>	1-12

BOTANY 995	Research-Plant Ecology	1-12
BOTANY 996	Research-Plant Physiology	1-12
BOTANY 999	Independent Work	1-3

### POLICIES

# **GRADUATE SCHOOL POLICIES**

The Graduate School's Academic Policies and Procedures (https:// grad.wisc.edu/acadpolicy/) serve as the official document of record for Graduate School academic and administrative policies and procedures and are updated continuously. Note some policies redirect to entries in the official UW-Madison Policy Library (https://policy.wisc.edu/). Programs may set more stringent policies than the Graduate School. Policies set by the academic degree program can be found below.

# MAJOR-SPECIFIC POLICIES PRIOR COURSEWORK

#### **Graduate Credits Earned at Other Institutions**

No credits from other institutions are allowed to transfer toward the minimum credit requirement and the minimum graduate coursework requirement.

# Undergraduate Credits Earned at Other Institutions or UW-Madison

No credits from an undergraduate degree are allowed to transfer toward the minimum graduate degree credit requirement and the minimum graduate coursework requirement.

#### Credits Earned as a Professional Student at UW-Madison (Law, Medicine, Pharmacy, and Veterinary careers)

No credits from a UW-Madison professional degree are allowed to transfer toward the minimum credit requirement and the minimum graduate coursework requirement.

#### Credits Earned as a University Special student at UW– Madison

No credits earned as a UW–Madison University Special student are allowed to transfer toward the minimum residence credit requirement, the minimum credit requirement, or the minimum graduate coursework requirement.

### PROBATION

Refer to the Graduate School: Probation (https://policy.wisc.edu/library/ UW-1217/) policy.

## ADVISOR / COMMITTEE

A major professor must be chosen as soon as possible after beginning graduate study and in all cases by the end of the first year. A vice major professor is required.

Students meet with an advisory committee before their first semester and with their MS committee by the end of their first year to plan their coursework.

Students meet with their advisor on a regular basis to assess progress.

### **CREDITS PER TERM ALLOWED**

15 credit maximum. Refer to the Graduate School: Maximum Credit Loads and Overload Requests (https://policy.wisc.edu/library/UW-1228/) policy.

### TIME LIMITS

The master's degree should be completed within two and one-half years of study.

## **GRIEVANCES AND APPEALS**

These resources may be helpful in addressing your concerns:

- Bias or Hate Reporting (https://doso.students.wisc.edu/bias-or-hate-reporting/)
- Graduate Assistantship Policies and Procedures (https://hr.wisc.edu/ policies/gapp/#grievance-procedure)
- Hostile and Intimidating Behavior Policies and Procedures (https:// hr.wisc.edu/hib/)
  - Office of the Provost for Faculty and Staff Affairs (https:// facstaff.provost.wisc.edu/)
- Employee Assistance (http://www.eao.wisc.edu/) (for personal counseling and workplace consultation around communication and conflict involving graduate assistants and other employees, post-doctoral students, faculty and staff)
- Employee Disability Resource Office (https:// employeedisabilities.wisc.edu/) (for qualified employees or applicants with disabilities to have equal employment opportunities)
- Graduate School (https://grad.wisc.edu/) (for informal advice at any level of review and for official appeals of program/departmental or school/college grievance decisions)
- Office of Compliance (https://compliance.wisc.edu/) (for class harassment and discrimination, including sexual harassment and sexual violence)
- Office Student Assistance and Support (OSAS) (https:// osas.wisc.edu/) (for all students to seek grievance assistance and support)
- Office of Student Conduct and Community Standards (https:// conduct.students.wisc.edu/) (for conflicts involving students)
- Ombuds Office for Faculty and Staff (http://www.ombuds.wisc.edu/) (for employed graduate students and post-docs, as well as faculty and staff)
- Title IX (https://compliance.wisc.edu/titleix/) (for concerns about discrimination)

### L&S POLICY FOR GRADUATE STUDENT ACADEMIC APPEALS

Graduate students have the right to appeal an academic decision related to an L&S graduate program if the student believes that the decision is inconsistent with published policy.

Academic decisions that may be appealed include:

- Dismissal from the graduate program
- Failure to pass a qualifying or preliminary examination
- Failure to achieve satisfactory academic progress
- Academic disciplinary action related to failure to meet professional conduct standards

Issues such as the following cannot be appealed using this process:

- A faculty member declining to serve as a graduate student's advisor.
- Decisions regarding the student's disciplinary knowledge, evaluation of the quality of work, or similar judgements. These are the domain of the department faculty.
- Course grades. These can be appealed instead using the L&S Policy for Grade Appeal (https://kb.wisc.edu/ls/22258/).
- Incidents of bias or hate, hostile and intimidating behavior (https://hr.wisc.edu/hib/), or discrimination (Title IX (https:// compliance.wisc.edu/titleix/), Office of Compliance (https:// compliance.wisc.edu/eo-complaint/formal-investigations/)). Direct these to the linked campus offices appropriate for the incident(s).

#### **Appeal Process for Graduate Students**

A graduate student wishing to appeal an academic decision must follow the process in the order listed below. Note time limits within each step.

- The student should first seek informal resolution, if possible, by discussing the concern with their academic advisor, the department's Director of Graduate Studies, and/or the department chair.
- 2. If the program has an appeal policy listed in their graduate program handbook, the student should follow the policy as written, including adhering to any indicated deadlines. In the absence of a specific departmental process, the chair or designee will be the reviewer and decision maker, and the student should submit a written appeal to the chair within 15 business days of the academic decision. The chair or designee will notify the student in writing of their decision.
- 3. If the departmental process upholds the original decision, the graduate student may next initiate an appeal to L&S. To do so, the student must submit a written appeal to the L&S Assistant Dean for Graduate Student Academic Affairs within 15 business days of notification of the department's decision.
  - a. To the fullest extent possible, the written appeal should include, in a single document: a clear and concise statement of the academic decision being appealed, any relevant background on what led to the decision, the specific policies involved, the relief sought, any relevant documentation related to the departmental appeal, and the names and titles of any individuals contributing to or involved in the decision.
  - b. The Assistant Dean will work with the Academic Associate Dean of the appropriate division to consider the appeal. They may seek additional information and/or meetings related to the case.
  - c. The Assistant Dean and Academic Associate Dean will provide a written decision within 20 business days.
- 4. If L&S upholds the original decision, the graduate student may appeal to the Graduate School. More information can be found on their website: Grievances and Appeals (https://grad.wisc.edu/documents/ grievances-and-appeals/) (see: Graduate School Appeal Process).

### OTHER

Assistantships are only available for thesis MS and PhD degrees.

# PROFESSIONAL DEVELOPMENT

# PROFESSIONAL DEVELOPMENT GRADUATE SCHOOL RESOURCES

Take advantage of the Graduate School's professional development resources (https://grad.wisc.edu/pd/) to build skills, thrive academically, and launch your career.

# LEARNING OUTCOMES

# **LEARNING OUTCOMES**

- Acquire and demonstrate fundamental understanding of the basic properties of plant life from the subcellular to the ecosystem level of organization.
- Use critical elements of the methodological or theoretical framework in a specialized botanical subdiscipline to develop hypotheses, acquire scientific information, and interpret results in the context of the historical scientific literature.
- 3. Develop the skills of communicating scientific information, especially in written form.
- 4. Engage in the critical evaluation of botanical scientific data and its interpretation.
- 5. Recognize and apply ethical conduct in the collection, analysis, and presentation of scientific data.
- Develop the skills essential to critical debate, discussion, and exchange of scientific information among peers and audiences of diverse intellectual and personal backgrounds.