

M.S.T. in Botany Academic Assessment Plan 2012-2013

College of Liberal Arts and Sciences
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Office of the Provost

*University of
Florida*

*Institutional
Assessment*

*Continuous Quality
Enhancement*

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Academic Assessment Plan for M.S.T. in Botany

College of Liberal Arts and Sciences

A. Mission

Graduate Program

The Botany Graduate Program in the Department of Biology seeks to advance an understanding of life at all levels, from molecules to the biosphere to understand the evolution, structure, maintenance and dynamics of biological systems. MST students learn to communicate their knowledge of science through teaching, contributing to science education of future generations.

College

The College of Liberal Arts and Sciences constitutes the intellectual core of the university. Its principal mission is to lead the academic quest to understand our place in the universe, and to help shape our society and environment. The College pledges to ensure equitable access for all of its constituencies present, drawing strength from our rich heritage of racial, ethnic and gender diversity. Through teaching, research and service, the College continually expands our knowledge and practice in the most fundamental questions in the arts, humanities, social sciences, and natural and mathematical sciences. At the graduate level, students master a specialized body of knowledge.

Our MST students are trained in both the fundamentals of biology and botany, but also in pedagogy, allowing them to contribute to providing undergraduates with the foundations in the biological sciences.

University

The University of Florida is a public land-grant, sea-grant and space-grant research university, one of the most comprehensive in the United States. The university encompasses virtually all academic and professional disciplines. It is the largest and oldest of Florida's eleven universities, a member of the Association of American Universities and has high national rankings by academic assessment institutions. Its faculty and staff are dedicated to the common pursuit of the university's threefold mission: teaching, research and service.

The University of Florida must create the broadly diverse environment necessary to foster multicultural skills and perspectives in its teaching and research for its students to contribute and succeed in the world of the 21st century.

Teaching, research and scholarship, and service span all the university's academic disciplines and represent the university's commitment to lead and serve the state of Florida, the nation and the world by pursuing and disseminating new knowledge while building upon the experiences of the past. The university aspires to advance by strengthening the human condition and improving the quality of life.

Our MST students are trained in both the fundamentals of biology and botany, but also in pedagogy, allowing them to contribute to providing undergraduates with the foundations in the biological sciences. Because this degree focuses on the training of educators, these students also contribute significantly to the University's service to the state and society.

B. Student Learning Outcomes and Assessment Measures

Please enter your Student Learning Outcomes in the table below.

SLO Type	Student Learning Outcome	Assessment Method	Degree Delivery
Knowledge	Students will identify, define, and describe the basic fundamentals of botany and pedagogy.	Students will pass a defense by their supervisory committee.	Campus
Skills	Students will demonstrate the ability to teach botany and biology.	Students will complete a teaching internship or participate as a teaching assistant for one semester. In addition, students will complete a course in pedagogy in biology. Finally, their ability to teach will be assessed by their supervisory committee.	Campus
Professional Behavior	Students will demonstrate ethical behaviors and professional conduct; they will be able to interact and with professionals at conferences.	Students will attend the graduate orientation seminar that covers aspects of professional behavior, including ethics.	Campus
Professional Behavior	Students will demonstrate ethical behaviors and professional conduct; they will be able to interact and with professionals at conferences.	Students will attend a local, national or international conference. Documentation of this will be provided to the supervisory committee.	Campus

C. Research

The MST degree is not a research degree, but is instead focused on building knowledge of Biology, Botany, and Teaching.

D. Assessment Timeline

Program M.S.T. in Botany

College of Liberal Arts and Sciences

Assessment	Assessment 1	Assessment 2	Assessment 3
SLOs			
Knowledge			
SLO 1	MST Defense		
Skills			
SLO 2	Teaching Experience by Graduation	Completion of Pedagogy Course	MST Defense
Professional Behavior			
SLO 3	Completion of Graduate Orientation Seminar		
SLO 4	Attendance at Conference by Graduation		

E. Assessment Cycle

Use this Assessment Cycle template for your plan. Add or delete rows as needed to accommodate your SLOs.

Assessment Cycle for:

Program M.S.T. in Botany College of Liberal Arts and Sciences

Analysis and Interpretation:

Completed by April 30

Program Modifications:

Completed by November 30

Dissemination:

Completed by December 31

SLOs	Year	10-11	11-12	12-13	13-14	14-15	15-16
Content Knowledge							
SLO 1				X	X	X	X
Skills							
SLO 2				X	X	X	X
Professional Behavior							
SLO 3				X	X	X	X
SLO 4				X	X	X	X

F. Measurement Tools

The SLOs will be assessed through a combination of methods. The knowledge SLO is measured by the student's chair and thesis committee during the MST defense. At the defense, the teaching ability is also assessed through a teaching presentation (third assessment, SLO 2).

Completion of teaching experience will be assessed by the graduate coordinator (first assessment, SLO 2), as will completion of the course in pedagogy (second assessment, SLO 2). Successful

completion of the Graduate Orientation Seminar (SLO 3) will be determined by the graduate coordinator.

Attendance at a conference (SLO 4) will also be assessed will be assessed by the Graduate Committee through the annual report submitted each year. A copy of this is provided in Appendix A.

Indirect assessments of all of these objectives will be done through a form in which faculty are asked annually to provide their opinion on their students' progress on many different fronts (including knowledge, communication, professional development, service, etc.). A copy of this is provided in Appendix B.

G. Assessment Oversight

Here, list the names and contact information of those who oversee the assessment process in your program. Add or delete rows as needed.

Name	Department Affiliation	Email Address	Phone Number
Rebecca T. Kimball	Biology	rkimball@ufl.edu	352-846-3737

H. Appendix A

Biology Department Graduate Student Annual Report Questions

1. Are you working towards an MS, PhD or MST?
2. What year did you begin working on your graduate degree at UF (if you did an MS here at UF and then moved to the PhD, give the year you began the PhD)?
3. What is the Month and Year of your most recent committee meeting (please use month abbreviation then year, e.g., Dec. 2011)
4. Did you turn in to the grad program assistant (currently Susan) a summary (~1 paragraph) of your last committee meeting that had been approved by your committee?

If you answered NO, please realized you are expected to do this and please do so in the future. This provides a record of what you and your committee agreed upon, and can help avoid problems later on (e.g., if they agreed you did not need to take a particular course, then you will have a record of that).

5. Total number of peer reviewed publications (all papers through 2012)?
6. Total number of first (or co-first) authored papers?
7. Number of peer-reviewed papers published in 2012 (please do not include in press papers)?
8. Provide citations for all papers published in 2012 (Authors, year, title, journal, volume and page numbers).

9. How many of your 2012 peer-reviewed papers were from research done for your MS or PhD thesis (so do not include publications from side projects or research done before you began graduate school)?
10. How many in press or submitted manuscripts do you currently have?
11. Please provide citations for any in press or submitted manuscripts.
12. Total number of presentations you have co-authored.
13. Total number of presentations you co-authored in 2012.
14. Number of 2012 presentations that you presented (e.g., you gave the talk or stood by the poster).
15. Please provide information for all presentations given in 2012 (Authors, year, title, conference).
16. Were any of your 2012 presentations invited? If yes, please give the number of invited presentations.
17. How many grants and fellowships have you applied for this year?
18. How much funding did you received in grants in 2012?
19. Please give the name of funding agencies that you received funds from in 2012.
20. What is the number of grants you have received prior to 2012?
21. What is the dollar amount of funding you have received prior to 2012?
22. Please provide a current CV.

I. Appendix B

Biology Department Graduate Student Evaluation

Please provide a yearly evaluation of your graduate students using this form and/or writing a letter that addresses these same points. The goal of this is to help graduate students in their professional development by guiding them to areas in which they may need to put additional effort while also indicating areas in which they are doing well.

After you have completed this form, you should set up a meeting with each of your students (individually) to discuss this information and help provide guidance your student can use to prepare themselves for the job they plan to seek when they graduate.

After that meeting, please sign this form and indicate the date of the meeting. Graduate students should also sign that the meeting occurred.

Student Name:

Please indicate where you feel the student fits on these various metrics considering the students year(s) stage in graduate school, career goals, etc. We realize that some metrics may not be relevant for some students, and/or that some may not be relevant at all career stages.

For each item, please note whether it is 1) Could use improvement, 2) The student is on track for their stage in graduate school, 3) The student exceeds expectations for their stage in graduate school, 4) It is too early to evaluate for this student, or 5) Not relevant for this student.

General knowledge of biology

Knowledge of specific subfield of study

Knowledge of research design in subfield of study

Knowledge of analytical methods in subfield of study

Oral presentation skills

Scientific writing skills

Grant writing skills

Networking and collaboration

Attendance and presentation at meetings

Publication of peer-reviewed papers

Teaching

Mentoring

Outreach

Time Management

Timeline to Graduation

Please sign below to indicate you met with your student to discuss this evaluation.

Signature:

Date of Meeting:

Please sign below to indicate you met with your advisor to discuss this evaluation.

Signature:

Figure 1. University of Florida Graduate/Professional Program Assessment Plan Review Rubric

Related resources are found at <http://www.ua.assessment.edu>

Program:		Year:			
Component	Criterion	Rating			Comments
		Met	Partially Met	Not Met	
Mission Statement	Mission statement is articulated clearly.				
	The program mission clearly supports the College and University missions, and includes specific statements describing how it supports these missions.				
Student Learning Outcomes (SLOs) and Assessment Measures	SLOs are stated clearly.				
	SLOs focus on demonstration of student learning.				
	SLOs are measurable.				
	Measurements are appropriate for the SLO.				
Research	Research expectations for the program are clear, concise, and appropriate for the discipline.				
Assessment Map	The Assessment Map indicates the times in the program where the SLOs are assessed and measured.				
	The Assessment Map identifies the assessments used for each SLO.				
Assessment Cycle	The assessment cycle is clear.				
	All student learning outcomes are measured.				
	Data is collected at least once in the cycle.				
	The cycle includes a date or time period for data analysis and interpretation.				
	The cycle includes a date for planning improvement actions based on the data analysis.				
	The cycle includes a date for dissemination of results to the appropriate stakeholders.				

University of Florida Graduate/Professional Program Assessment Plan Review Rubric, continued

Component	Criterion	Rating			Comments
		Met	Partially Met	Not Met	
Measurement Tools	Measurement tools are described clearly and concisely.				
	Measurements are appropriate for the SLOs.				
	Methods and procedures reflect an appropriate balance of direct and indirect methods.				
	The report presents examples of at least one measurement tool.				
Assessment Oversight	Appropriate personnel (coordinator, committee, etc.) charged with assessment responsibilities are identified				