Assessment Plan for the Field of Plant Pathology and Plant-Microbe Biology

All graduate students in PPPMB MS and PhD programs are required to write a thesis research proposal that is continually refined and discussed at Special Committee meetings. They are also required to take a core set of courses (requirements and expectations of students differ among program concentrations in PPPMB and are outlined on the PPPMB website). They participate every year in a student seminar series as both a presenter and a reviewer of other presentations. Students present research proposals and progress reports at the student seminars, and their presentations are evaluated by faculty and fellow students. Students are required to have at least one Special Committee meeting per year and submit an annual self-assessment form to the committee prior to the meeting. The self assessment form is reviewed and approved by all Special Committee members and a copy provided to the DGS. At each committee meeting, as well as at A and B exams, Special Committee members and appointed members complete a 2 page evaluation form (below) that provides a quantitative and qualitative assessment of a student’s abilities and progress. Copies of these forms are provided to the DGS and used to develop annual statistics of student and program performance. Students are also required to serve as a TA at least one semester for each degree and to complete on-line research ethics and compliance training.

Learning Outcomes – PhD
1. Communicate effectively to professional and lay audiences through writing, speaking and graphics.
2. Demonstrate a broad knowledge of core concepts in Plant Pathology and Plant-Microbe Biology taught in required courses and knowledge of their specialized area of study as defined by the requirements and expectations of each PPPMB program concentration and chosen minor subject areas.
3. Demonstrate awareness of ethics and compliance responsibilities.
4. Demonstrate teaching competence through TA, seminar and speaking experiences.
5. Conduct original and publishable research in their field and concentration of study.
6. Demonstrate an ability to think critically, apply scientific method, and manage resources allowing development of an independent research program
7. Show evidence of development as a professional in the discipline.

Learning Outcomes – MS
1. Communicate effectively to professional and lay audiences through writing, speaking and graphics.
2. Demonstrate a broad knowledge of core concepts in Plant Pathology and Plant-Microbe Biology taught in required courses and knowledge of their specialized area of study as defined by the requirements and expectations of each PPPMB concentration and chosen minor subject areas.
3. Demonstrate awareness of ethics and compliance responsibilities.
4. Demonstrate teaching competence through TA, seminar and speaking experiences.
5. Conduct publishable research in their field and concentration of study.
6. Demonstrate an ability to think critically and apply scientific method to develop testable hypotheses.

Learning Outcomes – MPS
1. Communicate effectively to professional and lay audiences through writing, speaking and graphics.
2. Demonstrate a broad knowledge of core concepts in Plant Pathology, Disease diagnosis and management.
3. Demonstrate awareness of ethics and compliance responsibilities.

Student Learning Outcome Assessment Tools (Learning outcomes measured are identified in Blue type)
Direct Measure
- Annual Committee Meeting – Faculty assessment of performance – All outcomes
- Research proposal – 1,5,6
- Student seminar participation and evaluation – 1, 4
- TA course evaluation - 4
Grant proposals written and funded – 1,3,5,6,7
Publications – 1,5,6,7
A Exam (PhD only) – 1,2,3,6
Thesis and B exam (MS and PhD only) – 1,3,4,5,6

Indirect Measure
Annual Self Evaluation Form – all outcomes
Ethics, compliance, management training - 3
Participation in professional activities (meetings, committees) - 7
Participation in outreach activities - 1,7
Job placement/Career tracking – all outcomes

Program Assessment
Exit interviews of graduating students (Dept Chair/DGS)
Students’ self assessment of achieving the Learning Outcomes defined for the degree
Observations and suggestions for how the field could improve the overall education and training experience

Exit interviews of students leaving the program prior to graduation (Dept Chair/DGS)
Students’ self assessment of obstacles and barriers to their achieving success in the program
Suggestions on what they and the field could have done differently to possibly change the outcome

Annual statistics of student performance based on Assessment Form (attached) used to judge achievement in committee meetings, student seminars, A-exams, B-Exams.
Tabulate results and distribute to faculty – anonymous data

Alumni Statistics – updated each year

Annual Field meeting of faculty (written minutes)
Discussion of results and data from other assessments
Discussion of ways to improve graduate programs and student experiences