Assessment Plan for the Field of Plant Biology

1. Learning outcomes
When students complete the Ph.D., they should be able to:
1. Conduct original, publishable research in the field.
2. Demonstrate a broad knowledge across several sub-disciplines as well as in-depth knowledge in at least one area of expertise of theory and research in the field.
3. Demonstrate a degree of independence in research.
4. Write and speak effectively to professional and lay audiences about issues in the field.
5. Demonstrate teaching competence through TA experience.
In combination, these outcomes will make the student well prepared for the next stage of his/her career in research or teaching.

2. Information:

a. Direct measure: use four categories
   i. Annual progress report
   ii. TA course evaluation
   iii. A exam
   iv. Thesis and B exam

All four measures are already in place, but a new form will be added that summarizes the assessment of learning outcomes (“outstanding”, “very good”, “fair”, or “unacceptable” for each learning outcome).

b. Indirect measure:
   i. Exiting student surveys asking three questions:
      1). How well did you achieve each of the following field learning goals [use the following scale: extremely well, very well, adequately well, not very well, not at all”]
      2). What aspects of your education in this field helped you with your learning, and why were they helpful?
      3). What might the field do differently that would help you learn more effectively, and why?
   ii. Career tracking
      Positions held and publications during 10 years after graduation.
      Exit survey will start next spring. Data on career tracking (going back to students graduated 15 years) will be collected by spring 2012.

3. Assessment
Annual meetings of Field faculty will be held to discuss data and identify action items.

a. Discuss achievement in learning goals at the annual Field meeting
For existing students and students with difficulties or underperformance.

b. Outcomes of the meeting:
   i. Identify ways to improve student learning when necessary.
   ii. Improve the quality of data collected if needed.
c. Maintain minutes of the meeting
i. To serve as a record and reminder
ii. To document for accreditors that assessment is taking place

Assessment of student progress towards achieving the learning goals will start from the next Field meeting.

Summary of measurements

<table>
<thead>
<tr>
<th>Measures</th>
<th>Goals addressed</th>
<th>Use of information</th>
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</thead>
<tbody>
<tr>
<td>Annual reports with the form of assessment of learning outcomes from the major advisor and thesis committee (after the annual committee meeting) are delivered to students in May each year.</td>
<td>1, 2, 3, 4</td>
<td>The reports are also reviewed by DGS. Students with difficulties are discussed annually at the field faculty meeting.</td>
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<tr>
<td>The thesis committee provide an evaluation of the thesis/ dissertations with the form of assessment of learning outcomes.</td>
<td>1, 2, 3, 4,</td>
<td>Summaries are presented for review annually at the field faculty meeting.</td>
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<tr>
<td>TA course evaluation</td>
<td>5</td>
<td>The evaluation is reviewed by the relevant teaching faculty. Students with difficulties are discussed annually at the field faculty meeting.</td>
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<tr>
<td>The field tracks graduates’ career and publication for a period of 10 years.</td>
<td>All five</td>
<td>Tracking results are reported biennially at the field meeting</td>
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<td>The field conducts student exit interviews that ask students about their learning and research experiences and the factors that influenced these experiences.</td>
<td>All five</td>
<td>Interviews will be reported biennially at the field faculty meeting.</td>
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