Student Learning Assessment
Workspace

Plant Pathology, Master

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General Information (Student Learning Assessment Workspace)

Degree:  Plant Pathology, Master
Department:  Plant Pathology
College:  Agriculture, Food and Environment
CIP:  26.0305
Major Begin Date:  01/01/1950

Here you can view the department homepage.

Here you can view the Mission Statement for the College of Agriculture, Food and Environment.
Standing Requirements

Mission Statement
The mission of the department is to improve humankind's understanding of plant disease through research and, utilizing this knowledge base, to educate students and residents of Kentucky about plant diseases. By these means, the department serves to promote plant health throughout the Commonwealth and encourage the use of science-based, economically practical disease management practices that seek to minimize environmental consequences.

Student Learning Outcomes

<table>
<thead>
<tr>
<th>Plant Pathology, Master Outcome Set</th>
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<table>
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<tr>
<th>Outcome</th>
<th>Mapping</th>
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</thead>
<tbody>
<tr>
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<td>Students will demonstrate mastery of oral and written scientific communication.</td>
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Assessment Plan

i. Introduction

The basic assessment approach uses a variety of different assessments of graduate student performance, most based on a rating scale of:

1) Poor
2) Fair
3) Good
4) Very Good
5) Excellent

The assessments are done primarily by the major professor and by the advisory committee. Our world-class faculty members have high expectations that are in line with the professional expectations in our discipline, and their assessments reflect this. Data relevant to each assessment tool is collected every year and compiled by the program Director of Graduate Studies (DGS). Data collection is completed by the end of September so that the analysis can be finished in time for the annual October 31st assessment deadline. Results of the analysis will be discussed by the Department of Plant Pathology Academic Program Committee in October or November of each year, and recommendations for improvements from that committee will be made to the full faculty at the December faculty meeting. These will be implemented immediately if they are approved by a majority vote.

ii. Assessment Oversight, Resources

College Learning Outcomes Assessment Coordinator is Associate Dean for Instruction, Dr. Larry Grabau.

Unit Assessment Coordinator is the Current serving DGS (at present Dr. Lisa Vaillancourt). The DGS is assisted in the task of compiling data by Shirley Harris, staff associate in the Department of Plant Pathology.

iii. Assessment Methods and Measures

Direct Measures:

Master students are evaluated for their progress through the program and their performance in all learning outcomes annually by their major professors and by the members of their advisory committees (see forms 1 and 2, attached).

Mastery of learning outcome #3 is also assessed for each student who enrolls in the PPA 770 seminar course and/or presents a seminar (including an exit seminar) during the assessment period, based on the average score for each student from their committee evaluation of that seminar (see form 3, attached).

Master students write a research thesis and conduct a thesis defense at its completion. The thesis defense also serves as a comprehensive examination of the required coursework. Technical mastery of the program learning outcomes is evaluated based on a quantitative assessment provided by each Advisory Committee member immediately after the exam (see attached form 4).

Indirect Measures:

Student grade point averages (GPAs) are tracked by DGS.
iv. Data Collection and Review

Some of the data are collected at the time of outcome testing (e.g. during annual student academic committee meetings, or after the required student seminars) and some are collected once per year on a schedule (e.g. the annual student performance evaluation, due on June 30 of each year.

The DGS will coordinate collection of these data. Assessment forms will be provided by the DGS to the major professor or seminar coordinator, who will administer the evaluation and then return the completed forms to the DGS for data compilation. The DGS will obtain current GPA data for each student from the annual evaluation form (form 1).

The benchmarks are both programmatic and individual. The programmatic benchmark is an average average performance of all students on all outcome assessments of 3 or better (on a 5 point scale where 1 is poor and 5 is excellent). Other benchmarks include: All students maintaining an average GPA of 3.0 or greater; all students having an annual committee meeting; all students progressing achieving satisfactory yearly progress through their program goals (these latter two assessments come from form 1, attached). For individuals, the benchmark will be an average performance on all outcome assessments of 3 or better, and the target will be a consistent improvement in performance during progression through the degree program.

Data are collected by students themselves, the DGS, and the major advisors, and compiled by the DGS with the staff associate.

v. Assessment Cycle and Data Analysis

The University of Kentucky requires an annual assessment. The assessment cycle is three years in order to obtain meaningful data.

Data collection will be completed by September of each year so that analysis can be finished by the DGS and staff assistant in time for the annual October 31 assessment deadline. Results of the analysis will be shared with the Academic Program Committee in November of each year, and recommendations for improvements will be made by that committee and both the analysis and the suggested improvements will be presented to the full faculty at the January faculty meeting. Suggestions will be implemented immediately if they are approved by a majority vote.

Annual IAPs from Plant Pathology are sent as required, to both the College Assessment Coordinator (CAC) and to the UK Office of Assessment (OA). The OA conducts a quality assessment of all IAPs at the campus level. The report on IAP quality is returned to the CAC who reviews that report, and may suggest adjustments before returning the report to the program. The DGS and departmental Academic Program Committee give all due consideration to the recommendations of the OA and CAC in their ongoing curriculum planning and assessment processes. During their periodic strategic planning and program review processes, the department examines the assessment data for indicators of student quality and achievement, and uses these data to inform the development of future strategies regarding the graduate program.

vi. Graduating Composition and Communication Requirement (GCCR)

The Graduation Composition and Communication Requirement (GCCR) is only required of undergraduate (Bachelor-level) degree programs. This program is exempt from the GCCR requirement.

vii. Teaching Effectiveness

Teaching evaluations are administered online for all instructors of record for all the courses. These are available to the Department Chairperson. If a faculty member consistently underperforms in their teaching evaluations, this is considered as part of their overall performance evaluation with the Department Chair, and the Department Chair may, at his discretion, refer the faculty member to available resources including the Center for the Enhancement of Learning and Teaching (CELT). It should be noted that our faculty generally perform at or above the college average, and some of our faculty have won prestigious college, university, and professional teaching awards.

viii. Post-Graduate Success
Our field is very small and in the past, we kept up with our students somewhat informally through our professional contacts and via social media and meet-and-greet events at our annual professional meeting. We are still in touch with most of our graduates, even from 20 and 30 years ago, who have remained in the profession. HOWEVER, recognizing that the professional success of our graduates has now become a very important assessment metric for evaluating our program success, we plan to institute a more formal instrument for tracking our students.

We will develop an exit survey this fall for students leaving the program that will be administered prior to their departure. This survey will include a request for information about their professional plans and immediate plans for relocation, as well as questions about their perceptions of the quality of their education in our department. This survey will be repeated at one and five years after graduation. The same survey will be administered to students who are leaving the program without graduating, but we will not follow up with those students.

ix. Appendices

Curriculum Map

Active Curriculum Maps

Plant Pathology, Master

Alignment Set: Plant Pathology, Master Outcome Set

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### Outcome

**Knowledge Acquisition**
Students will demonstrate technical mastery of the core information and principles of the discipline, including essential factual information, historical context, current literature and issues, practical applications, and professional ethics.

**Critical Thinking and Problem Solving**
Students will demonstrate abilities to think critically, solve problems, work collaboratively, use technology (including information technology) effectively, and develop and carry out high quality, hypothesis driven research.

**Communication**
Students will demonstrate mastery of oral and written scientific communication.

### Courses and Learning Activities

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<tr>
<th>Courses and Learning Activities</th>
<th>Knowledge Acquisition</th>
<th>Critical Thinking and Problem Solving</th>
<th>Communication</th>
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<tbody>
<tr>
<td>PPA 400G Principles of Plant Pathology</td>
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<tr>
<td>PPA 500 Physiology of Plant Health and Disease</td>
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<td>PPA 600 Critical Methods in Plant-Microbe Interactions</td>
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<td>PPA 640 Identification of Plant Diseases</td>
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<tr>
<td>PPA 641 Plant Disease, Population Biology, and Biotechnology</td>
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<td>PPA 650 Fungal Biology</td>
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<tr>
<td>PPA 670 Plant Bacteriology</td>
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<td>PPA 671 Advanced Plant Virology</td>
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<td>PPA 673 Advanced Plant Disease Resistance</td>
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<td>PPA 770 Plant Pathology Seminar</td>
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<td>PPA 784 Special Problems in Plant Pathology</td>
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<td>PPA 794 Research in Plant Pathology</td>
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