Dear Elliot:

I’m writing to let you know that I have received ten (10) responses to the e-mail below approving the proposal to develop a Tagged Master’s Degree program in Plant Health Management (MPHM).

The ten Council members who approved the proposal are: Ana Azevedo, Enrico Bonello, Ginny Bumgardner, Theresa Early, Margaret Newell, Ruth Peterson, Jim Phelan, Harald Vaessin, Ingrid Werner, Karla Zadnik.

I did not receive a response from Rob Perry or John Sheridan.

I’ll let you know if I receive any additional responses.

Susan Reeser
Hello Elliot,

Happy 2010! Please find attached a draft of the Program Development Plan for our proposed tagged professional degree entitled 'Masters in Plant Health Management' along with a letter from Anne Dorrance to me requesting I forward this draft to you for review. Anne Dorrance worked with Sarah Ellis and several other PP faculty to pull this draft together. This draft was presented to the entire PP faculty and received unanimous approval at our December department meeting - so everyone is on board and excited about moving this forward. Anne and Sarah are working with others in CFAES to refine the 'tracks' that will be nested within the MPHM. They have also solicited letters of support from the Department of Horticulture and Crop Science and the Department of Entomology.

Can you please take a look at the attached draft at your earliest convenience and let us know what else is needed to keep things moving forward. As we discussed, our goal is to get this proposal into the system and approved as soon as possible.

Thanks for your help and support!

Best wishes,

Mike
indicating that you’ve been given college go-ahead as well down the road. I’ll get back to you as soon as possible—hopefully, by midweek…

Best,
Elliot

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Hey Elliot,

Already checked in with Jill Pfister and the college side of the equation – you are right, they will want to chime in with a formal vote of support but we were basically told to keep them in the loop but to work with you directly until that time when we were a ‘go’ on your end.

Thanks for helping turn this around quick – lots of eager folks on my end – which is wonderful!

Best wishes,
m

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Hi Mike,

A quick follow-up generated by my reading of the cover letter as it printed out. Anne refers to a "professional MS." Wouldn’t be that-simply a tagged master's as per the description in the body of the proposal an MPH... Just want to make sure that we're on the same page at the outset...

e

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E - tagged masters is what we are talking about - getting the verbiage straight is part of the process - internally we've been referring to this as a tagged professional degree - specifically, a Masters in PHM. Your input on the phrasing we use is most welcome! Thanks m

From: Jill Pfister [mailto:pfister.1@osu.edu]
Hi Mike. Brazil is going well but as always I am definitely keeping busy trying to juggle here and Columbus. Thanks for keeping me in the loop. The proposal needs to be submitted to the College Committee on Academic Affairs for approval and then it will go on to Graduate School. I have read the proposal and would like you to take a look at a few sections that I think need editing:

2. Description of Proposed Curriculum
“...The Department of Plant Pathology already has two internship courses, PP693 Independent Study (in which students perform research and analyze data) and PP902 Mentored Extension/Outreach in Plant Pathology. Both….”

I am not sure what you are trying to say here. You are listing three different types of courses but then you say “both”. If it was me just list the specific courses: What are the two internship courses? Use the course numbers. I also don’t think you need to define 693. Am I making sense?

Use the correct abbreviation for Plant Pathology, not PP

You will need letters of support from the units outside of Plant Pathology whose courses you are using.

Some of the credit hours listed are not correct for supporting courses. I am not going to go through each one while I am here in Brazil but I know HCS 422 is a 4 credit hour course not 3. Entomol 460 is five credits.

Use the correct unit abbreviations for all the supporting courses

I do not think that 400 level courses can be used in a Masters Program?

Please let me know your time frame for submission to the College Committee. You also need to look at the CAA Academic Organization and Curriculum Handbook to be sure you have included everything you need.

Sincerely,

Jill A. Pfister

Jill A. Pfister
Assistant Dean, Academic Affairs
College Secretary
The Ohio State University
100 Agricultural Administration
2120 Fyffe Road
Columbus, OH 43210
Dr. Pfister,
This is a follow-up to your conversation with Dr. Boehm this morning about our proposed Masters in Plant Health Management program.

We are following the steps in the "Guidelines and Procedures for Review and Approval of Graduate Degree Programs" as Dr. Slotnick advised [http://oaa.osu.edu/curriculum_manual/documents/AppendixA_000.pdf](http://oaa.osu.edu/curriculum_manual/documents/AppendixA_000.pdf) - see page 5 part A). The first step is the development of a Program Development Plan. This is the step we are at right now. As we understand this document has to be approved by the department, then the college, then the University, and finally members of RACGS [http://oaa.osu.edu/curriculum_manual/documents/IIIAcadProg_000.pdf](http://oaa.osu.edu/curriculum_manual/documents/IIIAcadProg_000.pdf) - see flow chart on page 10, other info on page 7). Once this is done, the following happens as stated in the guidelines "Based on the RACGS reviews and their own assessment, the proposing institution will decide whether the PDP should be expanded to a Full Proposal and be submitted for RACGS review." We are assuming and prepared to do a full proposal upon receipt of comments and suggestions from RACGS. The web sites noted, as well as conversations and advice from Dr. Slotnick and SENR faculty, are what we are using in preparing our documents.

Please see attached an updated version of our PDP for the new Master's in Plant Health Management that we are proposing.

Please email me if you have any questions about the attached document.

Thank you,

Sarah D. Ellis
Lecturer
Department of Plant Pathology
The Ohio State University
2468 Kottman Hall
2021 Coffey Road
Columbus, OH 43210
Office Phone: (614) 292-4854
Cell Phone: (937) 302-6563
Fax: (614) 292-4455
e-mail: ellis.293@osu.edu
Randy and Elliot: We are pleased to present the proposal for a tagged professional Master’s degree in Plant Health Management from the Departments of Plant Pathology and Entomology for submission for approval as a new graduate degree program. We are submitting the proposal simultaneously to the Graduate School and the Office of Academic Affairs so that the proposal can move through both approval processes and hopefully through the system quicker. Elliot provided feedback as the proposal was developed so he is already familiar with the request.

The degree was approved unanimously by the Department Plant Pathology on December 18, 2009 and by the Department of Entomology on February 18, 2010. We have also included letters of support from the departments of Horticulture and Crop Science; Agricultural, Environmental, and Development Economics; Human and Community Resource Development, and the School of Environment and Natural Resources. The CFAES Academic Affairs Committee approved the proposal on April 23, 2010. The proposal has the approval of CFAES administration and on behalf of the administration and faculty we ask that you consider this new degree. Please contact me with any questions.

Go Bucks!

Jill A. Pfister
Assistant Dean, Academic Affairs and College Secretary
College of Food, Agricultural, and Environmental Sciences
The Ohio State University
100 Agricultural Administration
2120 Fyffe Road
Columbus, OH 43210

(614)292-1734
(614)292-1218 Fax
pfister.1@osu.edu

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From: Elliot Slotnick [mailto:slotnick.1@gradsch.ohio-state.edu]
Sent: Friday, May 21, 2010 9:20 PM
To: Jill Pfister
Cc: dorrance.1@osu.edu; welty.1@osu.edu; Dena Myers; Elliot Slotnick; Mike Boehm
Subject:
Dear Jill,

The Curriculum Committee has completed its initial review of the proposal for an interdisciplinary tagged Master’s degree program in Plant Health Management developed by the Departments of Plant Pathology and Entomology. It is in remarkably good shape for a new Master’s program undergoing its first formal institutional review. Indeed, when a number of relatively straightforward matters of concern are attended to and the proposal is resubmitted, I am confident that it will move quickly to the full Graduate Council for endorsement.

Specifically:

- Clarification is needed on the Course Chart on page 2 (and, by extension, in the program’s requirements). Should “Directed Electives” be removed and eliminated from both? The required credit hours (and, perhaps, more) are met without them. And no credit hours are indicated for them. What are they?
- The section in the proposal on Administrative Arrangements for the program makes no mention of the program’s Graduate Studies Committee—its composition and provisions for representation, replacement of its members, designation of the Graduate Studies Committee Chair, etc. Will all programs whose courses are included in the degree offering be represented? What will the GSC “do?”
- Relatedly, in Section 5 of the proposal about Enrollment, additional information should be added about Admission. What will be expected by way of applicant credentials? How will admissions decisions be made? Will the GSC handle this task? Will a cap be placed on admission?
- The Prospective Enrollment Table on Page 4 does not include “credit hours and subsidy for the first five years” as is indicated in the table’s label. Please correct the label.

All of these matters would appear to be relatively easy to address and should not cause undue delay in the processing of the proposal. The Committee looks forward to receiving a clean copy of your revision.

Best,
Elliot

From: Jill Pfister [mailto:pfister.1@osu.edu]
Sent: Wednesday, June 02, 2010 3:12 PM
To: Elliot Slotnick
Cc: dorrance.1@osu.edu; welty.1@osu.edu; Dena Myers; Mike Boehm; Randy Smith; stokoe.1@osu.edu; mitchell
Subject: RE: Interdisciplinary Tagged Master’s Degree Program in Plant Health Management

Elliot: Attached is the revised proposal for the interdisciplinary tagged Master’s degree program in Plant Health Management. Hopefully we have submitted this quick enough to make your next meeting. I believe the faculty have addressed all four of your concerns. Let me know if you have any questions
Thanks, Jill—Dena will be circulating this to our Committee ASAP. We have a lot of end-of-quarter items to work through so, I suspect, we may end up after the Grad Council meeting doing some final curriculum approvals via e-mail exchanges. Please be assured that it won’t simply “sit” over the summer.

Best,
Elliot

All,

Theresa and I will be talking on the phone (hopefully) late this afternoon. Here are all of the comments that I have, at present, on the curriculum proposals currently under review. It strikes me that nothing here is serious enough such that we shouldn’t be going forward with all of these at the Graduate Council meeting on Monday, as long as we do so conceding that there are revisions that remain prior to our sending them on to Randy Smith and CAA. In short, I’m not sure there is a reason to hold these up at the last Graduate Council meeting That said, I would anticipate that, after Graduate Council endorsement, I will still have some work to do on these proposals with their drafters to get them into final shape for CAA. There is also a chance that Council will want to see the remaining revisions and have a final e-mail vote beyond the date of the
Monday meeting. Time will tell...

Given that Monday is the last Graduate Council meeting of the year, there’s really no need for our scheduled Curriculum Committee meeting on Tuesday, nor is there a need to hold that time open into the future. If and when new Curriculum Committee items come through the door during the summer (and we are awaiting a seemingly simple Greek and Latin revision) I hope that I can send them to you electronically through the summer and that we can work that way unless a face-to-face meeting seems necessary.

So, thanks so much for all of your efforts through the year(s). I think that we can all take some pleasure (pride?) in knowing that we do good work and that we have fun doing it. May I assume that each of you is willing to keep at it next year? Also, any final comments on the proposals that you have in hand—or concerns that some of them might not be ready to go forward, would be welcome.

Cheers to all,
Elliot

 Revision of Interdisciplinary Tagged Master’s Program In Plant Health Management proposal

there is a typo on the heading: Department of Plant of Pathology

Here are some comments I had after reading the MPHM proposal. Mostly they are questions, not corrections or objections, so I don’t know how helpful this will be. It seems like a good idea in general.

One thing is that they make a good case about the need for the program (p.4) but they don’t have anything about desire from the student end of things. Have they had students already trying to do this kind of a combined degree? My main question was whether or not a regular MS student in PP or E couldn’t more or less do this degree by adding courses from the other program. So now there are 4 programs: Plan B MHPM, 2 MS degrees in each discipline and then an MS Thesis option.

Another question is that they are proposing this Masters degree in Quarter credits at a minimum of 45 credits but the semester requirement will be 35 which is more that the 4 credits difference (the equivalent would be 30) so they will have to account for that in the conversion. Also, it seems like on p. 3 on the list of Directed Electives the credits should be 6-10 in case someone takes two 5-credit courses which brings their total to 45-51.

On the bottom of p.1 it seems they plan to create more courses for non-traditional students or at least offer the same courses at other times?

34 credits for core courses seems high – but again, just noticing!
Hello Elliott,

Sarah Ellis and Anne Dorrance both recently asked if I had any insights about where this stood in the process. I said nope but that I’d ask… Any update that I could pass along?

Thanks,

Mike

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Dear Sarah and Anne,

So, now that the big guy has weighted in I think I’d better get you the remaining (very minor) comments that need to be attended to prior to seeking an electronic summer e-mail vote from the Graduate Council and getting this on to CAA for the next level of review. The Regents processes are pretty quiet over the summer, but we should be able to get it moving across the state first thing in the Fall if CAA review goes well. Here goes.

Your initial proposal was in extraordinarily good shape and didn’t really need very much by way of fine tuning. The same, to an even greater degree, can be said of your revision. We’re just about there with a couple of things to be attended to on one more version to be submitted to me electronically for obtaining Graduate Council approval.

1. There is a typo on the cover page heading—See “The Department of Plant of Pathology”...

2. You’ve done a superb job of clarifying the curriculum, credit hour concerns, directed electives and the chart. (See, review processes do matter!) One small thing on page 3. Shouldn’t directed electives be 6-10 hours? At the two extremes couldn’t a student take two 3 hour or two 5 hour courses? That appears possible from the course list. That would make the total hours 45-51. More to the point, couldn’t the requirement be stated that with advisor consultation students must take two directed elective courses (6-10 credits)? That puts the emphasis on the number of directed elective courses required with the credit hours being secondary.

3. You make a very good case (p.4) for evidence of need from the employer side of the equation. For strengthening this even more (and here we are mainly thinking about the statewide approval processes to follow) do you have anything to say regarding student demand? Even if it is just a line or two about inquiries that students have made about this type of program—whatever you might have....

4. Relatedly, have you had students either in the Plant Pathology or Entomology MS.
programs who wanted to pursue this type of combined degree? If so, could they do so under the existing program structures? Put another way, are we now going to be offering an overabundance of programs to include the MPH, and thesis and non thesis MS options in the two constituent programs with the “same” degree possible to pursue in three ways (MPH or Plan B MS. programs in both disciplines)?

I think the “fixes” are really simple—and that item 4 may be a simple “no”—which is why you are proposing this in the first place. We’ll look forward to getting the revised proposal at your earliest convenience. Terrific work on this, kudos to all.

Best,
elliot

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Dear Elliot,

Thank you for your comments, I think that I have corrected everything as outlined below. With regards to the curriculum, this now reflects the 5 credit classes that are listed in the directed electives.

We currently have one official request to pursue this program from an internal extension associate in one of our counties. This is noted on page 5.

This situation also addresses item 4, in that currently these “potential students” could not pursue this type of interdisciplinary program. To pursue a M.S. in Plant Pathology or Entomology requires a large research component and this is essentially replaced with individual studies/internships and more targeted course work in the tagged degree program. The Plan B M.S. would require too many individual dept courses as such students would not have the breadth that this tagged MS program allows students to pursue. In addition, this is a tagged degree with a clear name designation where the plan B, are specialized for Entomology or Plant Pathology.

Thank you very much for all of your efforts to move this through the process. Please let me know if there are further questions or concerns.

Sincerely,
Anne

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Dear Anne,

Thanks for turning this around so quickly and for addressing the suggested final changes. I will go forward with this revision and ask Susan Reeser to circulate it electronically to the Graduate Council for an endorsement vote. I’m off to a meeting in San Juan on Saturday and will be back in the office the following Thursday. I’ll ask Susan to give a “reasonable” yet still relatively short leash to Council for their vote, say a week’s time. If all falls into place as I hope and expect, I should be able to send this off to Randy for CAA review by the end of next week. Once it is in Randy’s hands I’ll work with him on a calendar for our starting the statewide review processes through RACGS. Given very full CAA agendas through their summer meetings and the constraints imposed by the scheduling of the University Senate and the OSU Trustees meeting in the Fall, the forward movement of the proposal may take a bit more time than any of us would like. Please know that we will all do everything we can to facilitate the proposal’s approval in a timely fashion.

Best,

Elliot

Dear Susan,

Attached is the revised proposal for the delivery of a tagged Master’s degree program in Plant Health Management that has been endorsed by our Curriculum Committee. It needs to be approved by the Graduate Council, through our electronic Summer voting process for those remaining proposals needing only minor revisions since the time that they were introduced at the final 2009-2010 Council meeting. We should give Council members a “reasonable” yet relatively short leash to register their up or down votes. I didn’t anticipate having this one ready so soon after the Ed.S proposal and you and Pat can certainly allow a little bit longer time frame for its review—perhaps through the weekend of the 17th? Frankly, it has a bit less urgency than the Ed.S. and if it gets to the CAA a few days later, I’m fine with that. As with the Ed.S., I think, once we receive the go ahead from a majority of Council members and nobody has raised a significant concern, we can send it forward.

Thanks, in advance, for getting this in motion.

Best,

E
I approve of the proposed Master’s Degree Program in Plant Health Management (MPHM). One question for the organizers, though—given that the proposed audience includes ngo’s, peace corps, extension services, etc., why not include in the optional electives a “green” agriculture course on non-chemical pest management, or water management, etc.

Non-chemical pest management is the primary means to manage plant diseases and many insects via host resistance (non-gmo) and cultural practices, so these are in fact covered in all of the focuses pest/disease management courses. Water management is a great idea and we will make inquiries as to which course in SENR may be most appropriate.

Green is great in the College of Food Agricultural & Environmental Sciences!!

Anne
1. Designation of the New Degree Program

We propose to develop a tagged, professional degree program called Master in Plant Health Management (MPHM). This program will provide an applied graduate degree for practicing professionals and others. The target audience for the proposed program includes: extension educators (Agriculture and Natural Resources), technical specialists with state and federal agencies (e.g. Animal and Plant Health Inspection Service (APHIS), USDA Forest Service, State Plant Industry Depts.), agriculture business industry (e.g. seed company pathologists, entomologists), certified crop consultants/advisors, agriculture retailers/dealers, landscape arborists and foresters, and governmental and non-governmental organizations involved in agriculture in developing countries (e.g. Oxfam, Peace Corps).

The MPHM degree is a non-thesis degree that will be in addition to the Plan B non-thesis option currently available to students pursuing the Master of Science in the Plant Pathology or Entomology Graduate Programs. The non-thesis option is still viable for students who wish to pursue specific avenues in the Plant Pathology or Entomology programs which are not covered by the MPHM program or a research-oriented program leading to a thesis. The MPHM will be a separate degree program that students will select for its theory-to-practice nature. Students graduating from this program will have the expertise to practice integration of the key scientific concepts spanning diagnostics to integrated disease and pest management.

2. Description of Proposed Curriculum

The proposed curriculum would require a minimum of 45 credits (35 credits for semester based system depending on final transfer of courses) which is the current University requirement for a non-thesis Masters degree. This curriculum is interdisciplinary by design and thus will give students a great deal of flexibility in additional courses beyond the core. This curriculum is also designed to provide opportunities for non-traditional students with night courses, weekend intensive labs, summer classes, and specialized internship courses. There are existing courses in The Department of Plant Pathology (PLNT PTH 693 Individual Studies, and PLNT PTH 902 Mentored Extension/Outreach in Plant Pathology) as well as those in development in the Dept. of Entomology that are well suited for students pursuing this degree.
Credit courses will be divided as follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Quarter Credit Hrs</th>
<th>Semester Credit Hrs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Targeted course in Plant Pathology or Entomology</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Special Study or Internship</td>
<td>2-3</td>
<td></td>
</tr>
<tr>
<td>Directed Elective</td>
<td>6-10</td>
<td></td>
</tr>
<tr>
<td>Total credits</td>
<td>45-51</td>
<td></td>
</tr>
</tbody>
</table>

* to be determined once credits are finalized

Core

The core curriculum will focus on specifics in plant health management with key emphasis on detection, diagnosis, and management of plant diseases and insect pests. In addition, students will also be required to learn basics in crop physiology, agronomy, soil fertility, and weed science— all key contributing factors in diagnosing and managing plant diseases and pests. It is expected that some of the students enrolling in this curriculum will have some of the core courses and readily add from these other lists.

Plant Pathology (PLNT PTH) and Entomology (ENTOMOL) required courses (18 credits):

- PLNT PTH 685 Diagnostic Field Plant Pathology 3
- PLNT PTH 603 Disease Management 5
- ENTOMOL 500 General Entomology 5
- ENTOMOL 660 Advanced Economic Entomology 5

This is an integrated Master’s thus the following courses are also required for the core (16 credits):

- ENR580 Soil Fertility and Fertilizers 3
- Or HCS 636 Mineral Nutrition
- HCS 610 Weed Control in Horticulture Crops 3
- HCS 621 Crop Physiology & Production 5
- HCS 887 Techniques in Experimental Design 5

One of the following from Plant Pathology/Entomology:

- PLNT PTH 501 Diseases of Ornamentals 3
- PLNT PTH 610 Diseases of Forest and Shade Trees 4
- PLNT PTH 612 Diseases of Turf 3
- PLNT PTH 615 Diseases of Fruit and Vegetables 3
- PLNT PTH 614 (NEW 2010) Diseases of Field Crops 3
- ENTOMOL 650 Biological Control of Arthropod Pests 4
- ENTOMOL 694 Insect Biodiversity Analysis (Group Studies) 4
Field of study, special internship classes (select one, 2-3 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN TOMOL 693</td>
<td>Individual Study</td>
<td>2-3</td>
</tr>
<tr>
<td>PL NT PTH 693</td>
<td>Independent Study</td>
<td>2-3</td>
</tr>
<tr>
<td>PL NT PTH 902</td>
<td>Mentored Extension/Outreach in Plant Pathology</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Directed Electives (6-10 credits):

Through careful consultation with their advisors, students must take two directed elective courses that best reflect their personal interest. The following are courses supporting different “fields of interest”

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE DECON 625</td>
<td>Commodity Futures and Options Markets</td>
<td>4</td>
</tr>
<tr>
<td>AE DECON 631</td>
<td>Benefit Cost Analysis</td>
<td>5</td>
</tr>
<tr>
<td>AE DECON 712</td>
<td>Finance and Risk Management</td>
<td>4</td>
</tr>
<tr>
<td>AE DECON 810</td>
<td>Agriculture Firm Management</td>
<td>3</td>
</tr>
<tr>
<td>AEE 723</td>
<td>Strategic Planning in Agriculture and Extension Education</td>
<td>3</td>
</tr>
<tr>
<td>AEE 735</td>
<td>Methods of Teaching Agriculture and Extension Methods</td>
<td>3</td>
</tr>
<tr>
<td>AEE 770</td>
<td>Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>AEE 823</td>
<td>Program Planning in AEE</td>
<td>3</td>
</tr>
<tr>
<td>AEE 842</td>
<td>Leadership and Administration in AEE</td>
<td>3</td>
</tr>
<tr>
<td>EEOB 674</td>
<td>Physiological Ecology of Plants</td>
<td>5</td>
</tr>
<tr>
<td>EN R 720</td>
<td>Characterization of soil in field and laboratory sampling</td>
<td>3</td>
</tr>
<tr>
<td>EN TOMOL 650</td>
<td>Biological Control of Arthropod Pests (if not taken above)</td>
<td>4</td>
</tr>
<tr>
<td>EN TOMOL 694</td>
<td>Insect Biodiversity Analysis (if not taken above)</td>
<td>4</td>
</tr>
<tr>
<td>EN TOMOL 641</td>
<td>Insect Ecology</td>
<td>5</td>
</tr>
<tr>
<td>EN TOMOL 642</td>
<td>Insect Behavior</td>
<td>4</td>
</tr>
<tr>
<td>HCS 602</td>
<td>Field Crop Ecology</td>
<td>3</td>
</tr>
<tr>
<td>HCS 625</td>
<td>Crop Breeding</td>
<td>4</td>
</tr>
<tr>
<td>HCS 821</td>
<td>Advanced Crop Physiology</td>
<td>5</td>
</tr>
<tr>
<td>HCS 894</td>
<td>Physiology Plant Stress Response</td>
<td>5</td>
</tr>
<tr>
<td>PL NT PTH 501</td>
<td>Diseases of Ornamentals (if not taken above)</td>
<td>3</td>
</tr>
<tr>
<td>PL NT PTH 610</td>
<td>Diseases of Forest and Shade Trees (if not taken above)</td>
<td>3</td>
</tr>
<tr>
<td>PL NT PTH 612</td>
<td>Turfgrass Disease (if not taken above)</td>
<td>4</td>
</tr>
<tr>
<td>PL NT PTH 614</td>
<td>Diseases of Field Crops (if not taken above)</td>
<td>3</td>
</tr>
<tr>
<td>PL NT PTH 615</td>
<td>Diseases of Fruits and Vegetables (if not taken above)</td>
<td>3</td>
</tr>
<tr>
<td>PL NT PTH 660</td>
<td>Mycology</td>
<td>5</td>
</tr>
<tr>
<td>STAT 529</td>
<td>Data Analysis (ANOVA)</td>
<td>3</td>
</tr>
</tbody>
</table>

Final Exam

As per the requirement of the graduate school, each student will complete a Final Master’s Examination which will include both a written and oral examination. The examination will evaluate the student’s proficiency and understanding of his/her field of study, with emphasis on the topic selected from students special projects/internships.
3. Administrative Arrangement

The Departments of Plant Pathology and Entomology in the College of Food, Agriculture and Environmental Science will be home of this tagged Masters program. These two departments are unique in the State University System of Ohio. Plant Pathology is the only department which offers an advanced degree in Plant Pathology and one of 16 stand-alone departments out of 34 in the USA. Likewise, the Department of Entomology at OSU is the only department of entomology in State University System of Ohio, and is one of only 34 stand-alone entomology departments in the USA. The Department of Entomology at OSU offers a comprehensive cell to ecosystem approach to the study of insects. Using insects as a model, a multidisciplinary curriculum and research expertise covers everything from traditional areas of entomology to basic applications, providing students a breadth of experience.

Program Administration:

The New MPHM program will be administered by the Masters in Plant Health Management Graduate Studies Committee. This committee will be comprised of 3 members from Entomology and 3 members from Plant Pathology who are appointed by the Chairs of the respective departments. The Chairs of Entomology and Plant Pathology will also designate the individuals who will serve as co-Chairs of this program. Members of the committee serve at the discretion of the chairs. An Academic Program Coordinator will also be assigned to guide and oversee the administration of this program. The Academic Coordinator will be a non-voting member of the committee and will work closely with the co-chairs, to facilitate communication to the other departments on enrollment in the program and potential numbers for classes in the associated departments.

The MPHM Graduate Studies Committee will accept or deny applicants into the Masters in Plant Health Program. The committee will review students’ progress in the program, facilitate opportunities for special studies or internships, and assign advisors based on enrollees’ interests and future career goals.

4. Evidence of Need

Seed companies, chemical companies, federal agencies, extension departments, landscape companies, etc. are finding it increasingly difficult to hire trained plant pathologists and entomologists to fill key positions in the US and abroad. These positions were rarely advertised 20 years ago but now companies are actively recruiting and using private head-hunters to identify qualified candidates.

More than half of the US Extension Educators will retire in the next five years; there is also the recent development that educators will be required to have areas of expertise as a result of the consolidation and movement to regional centers in Extension (Chronicle of Higher Education, Dec 2009). There is a great need for students who are very familiar
with US agriculture systems to fill these positions. The challenge is that this will be the first generation of students in which the majority is at least two generations removed from the “family farm”.

We currently have one internal request from an Ohio State University Extension personnel to pursue this degree.

In a recent survey of employers of plant pathologists by the American Phytopathological Society Education Committee the skill set most desired were those with “field experience with plant diseases, knowledge of disease control and broad knowledge of plant pathology” (McDonald et al., 2009. Plant Disease 93:1238-1251). This Master’s in Plant Health Management will help to address this need.

There is one new program, an Online Master of Agriculture and Life Sciences Program which was just started at Virginia Tech. Within the State University System of Ohio, there is no other program similar to what we are proposing that provides this type of focused, theory-to-application training for the Master of Science.

5. Prospective enrollment

Projected enrollment for first five years.

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<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<td>20</td>
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<td>Total enrollment / year</td>
<td>10</td>
<td>20</td>
<td>25</td>
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<td>35</td>
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</tbody>
</table>

Admission: Applicants will be accepted year round. A limit of 20 students will be accepted each year (projected program total of 40). Applicants will submit a current resume, brief statement of goals and career objectives, and three letters of recommendation to the MPHM Graduate Studies Chairs.

Candidates for admission must satisfy all criteria for admission set forth in Section II.2 of the Ohio State University Graduate School Handbook (2009-2010).

**Admission Criteria II.2**

An applicant must submit documentation that demonstrates fulfillment of the following admission criteria or equivalent qualifications:

1. an earned baccalaureate or professional degree from an accredited college or university by the expected date of entry
2. a minimum of a 3.0 cumulative point-hour ratio (on the 4.0 scale used at this university) in all previous undergraduate and graduate work
3. prerequisite training that will enable the student to pursue the graduate program to which admission is sought
4. a minimum score of 550 on the Test of English as a Foreign Language (TOEFL), 82 on the Michigan English Language Assessment Battery (MELAB), or 7.0 on the International English Language Testing System (IELTS). The minimum score on the computer-based TOEFL (CBT) is 213. The minimum score on the Internet-based TOEFL is 79. This requirement applies only to an applicant from a country where the first language is not English, unless a bachelor’s degree or higher was earned in an English-speaking country.

If an applicant has a grade point average below 3.0, he or she is required by the University to take the GRE General Test and report the results to the MPHM Graduate Studies Committee. Applicants with an undergraduate GPA of 3.0 or above do not need to take the GRE.

6. Enrollment of Underrepresented Groups

This program is designed to train new professionals in the applied fields. We expect that this type of program will attract more women and minorities due to the flexible nature of this curriculum and innovative course offerings. We also expect that more courses will be offered at times suitable for those already employed as well as being attractive to our own Extension Educators.

7. Faculty and Facilities Available

Existing faculty in the Departments of Plant Pathology and Entomology will be sufficient to handle the expected increased advising load. Existing OSU courses and their semester equivalents, both in our departments and in other OSU units, and one new course (PLNTPTH 614 Diseases of Field Crops) will support the curriculum. This curriculum will demand a continued commitment to offering courses at nontraditional times (evenings/weekends) as well as unique formats such as PLNTPTH 685 Diagnostic Plant Pathology – intense 10 day session in late summer; PLNTPTH 614 will be offered in the evening.

8. Need for additional facilities and staff

We currently have a Graduate student coordinator in the Dept. of Plant Pathology who can handle the incoming applications and coordinate with the Dept. of Entomology. If this program becomes highly successful, then a coordinator will be sought specifically for this program. We don’t anticipate that need until the 3rd or 4th year of the program. There are several classrooms in Kottman Hall, Columbus Campus as well as Selby Hall, Wooster Campus that are working labs, with microscopes able to project images over the web. This type of technology will support more distance education as our capabilities improve for this type of delivery in the future.
9. Projected additional cost

All of the courses are currently part of the curricula across the departments in the College of Food, Agricultural and Environmental Sciences. At this time, we are not projecting any additional costs.

10. The use of consultants or advisory committees

There were no paid consultants used in the development of this program. However, several of the Extension Teams, such as Agronomy Team, were consulted on the development of the curriculum as well as graduate program chairs in each of the Departments.

Masters Plant Health Management
- Approved December 18, 2009 Department of Plant Pathology
- Approved February 18, 2010 Department of Entomology
- Amended May 25, 2010 Dept. of Plant Pathology and Dept. of Entomology