Liaison

William Braunworth Jr - Department Head / Horticulture
These options should be helpful in the recruitment of students seeking more specific degrees related to these topics.
(Responded on Sep 20, 2013)

Katherine Kelly Donegan - Advisor-Academic / Horticulture
Support this proposal.
(Responded on Sep 20, 2013)

William Edge - Department Head / Fisheries and Wildlife
We have no objection to this proposal, but we wonder why BPP is not rolled into this proposal at this time, rather than anticipating that they may come under this proposal in the future.
(Responded on Oct 11, 2013)

CSS reply - BPP could file a separate proposal to create the same two options under BPP, if they so desire. Until we determine whether the umbrella “plant science” degree will move ahead as a two party (HORT/CSS) or three party (HORT,CSS,BPP) agreement and file the needed CAT I to do so, we are obliged to do these separate proposals.

Craig Marcus - Department Head / Enviro / Molecular Toxic
EMT would have no concerns regarding this proposal and would support the new programs.
(Responded on Oct 13, 2013)

Robert Mason - Chair-Biology Program / Zoology
This proposal doesn't affect the Biology Program. If that is the case, Biology has no objections.
(Responded on Oct 23, 2013)

Claire Montgomery - Interim Department Head / Forest Eng/Resources/Mgmt
I have no concerns about this proposal.
(Responded on Oct 10, 2013)

Gregory Thompson - Department Head / General Agriculture
The College of Agricultural Sciences Curriculum and Assessment Committee supports this proposal.
(Responded on Sep 30, 2013)

Dr. Lynda Ciuffetti provided this comment - "The faculty in Botany and Plant Pathology had the opportunity to review the proposal and support the ENT and PBG graduate options. Several comments were made in particular on the PBG option. Faculty welcomed participation of BPP in the PBG option as it is very relevant to the work of faculty in BPP. Faculty suggested that a course in Genomics should be required. Finally, it is noticed that Dr. Chris Mundt is not listed as supporting faculty - it is suggested that he be contacted as to his interest in participating in this option due to the relevance of his research program."
We have responded to the suggestions from BPP faculty to add Dr. Chris Mundt as a member of the PBG group and added a genomics class among those that can be taken to meet the PBG class requirement.
Category II Proposal to Create an Entomology Option in the Existing Horticulture Graduate Degree

Justification
The Departments of Horticulture (HORT) and Crop and Soil Science have agreed to combine their graduate plant science curricula into one, shared degree program. Under this merger, the HORT and Crop Science (CS) graduate programs would be eliminated and the new program created. The Soil Science graduate degree will remain a separate entity at this time. The hoped for establishment timeframe for this new degree is during AY14, but this will depend on continued conversations with the new department head in HORT and discussions with BPP through which that unit may also come under the combined degree umbrella.

In anticipation of this new degree and in order to move several new study areas to recognized status, we are asking that two transcript visible graduate degree options be created under the existing HORT and CS degrees. The faculty of both HORT and CS believe it is important to establish these new options at this time in order to best serve student needs and utilize departmental resources.

This proposal requests the creation of an Entomology (ENT) option for both M.S. and Ph.D. degrees under the existing HORT degree

General Requirements for a Horticulture (HORT) M.S. or Ph.D. Degree

Coursework
There are few specific course requirements for a HORT degree. Most needed coursework is determined by the student’s committee based on the student’s specific interest and prior education. These requirements do exist:
1. Follow all Graduate School rules and regulations in place when your degree program begins
2. Complete HORT 511 – Research and Education Perspectives in Horticulture (2)
3. Complete 4 credits (for M.S) or 6 credits (for Ph.D.) from among a selection of the three sister current topics courses: HORT 518 (2), HORT 519 (2), HORT 520 (2)
4. Give one seminar in addition to their thesis defense (HORT 507 or 607)
5. Ph.D. students are required to include a teaching experience in their program of study (HORT 609)
6. All students must document that they have participated in professional ethics training activities.

Research
In addition to the coursework required in the student’s program of study, M.S. thesis and Ph.D. students will complete a comprehensive research project in some aspect of horticulture under the direction and with the support of their major professor. M.S. non-thesis students will complete a research project or write a paper in some aspect of horticulture under the direction and with the support of their major professor.

Learning Outcomes and Assessment

M.S.
1. Conduct research with the outcome being a creative work
a. Assessed during oral exam with Grad Council Rep having specific responsibility for assessment
2. Demonstrate mastery of subject material
   a. Assessed by coursework grades and during oral exam
3. Be able to conduct scholarly activities in an ethical manner
   a. Documentation of training activities on Program of Study

Ph.D.
1. Produce and defend an original significant contribution to knowledge
   a. Assessed during final oral exam with Grad Council Rep having specific responsibility for assessment
2. Demonstrate mastery of subject material
   a. Assessed by coursework grades and during oral exam
3. Be able to conduct scholarly activities in an ethical manner
   a. Documentation of training activities on Program of Study

Additional Requirements for an Option in Entomology

Program Information
The Entomology (ENT) option at Oregon State University embodies the Land Grant mission of integrated research, teaching and extension in the context of understanding the basic biology of insects and with this knowledge then working with insects in natural and/or managed environments. Programs range from basic to applied and can include enhancement of environments to increase insect numbers to management of environments to diminish the numbers of insect pests. Entomologists regularly cooperate with plant scientists, physiologists, pathologists, soil scientists, genomicists, molecular biologists and experts in other fields.

Students in the Entomology option will learn an interdisciplinary approach to entomology by taking courses across a broad spectrum of disciplines. The option may be tailored to meet students’ career goals including further graduate education or directly entering public or private sector positions. After completing their degree, students will have gained fundamental knowledge in entomology that may be applied in a range of agricultural, forested, aquatic, or human environments.

Supporting Faculty
Crop and Soil Science
   Sujaya Rao, Professor, insect pest management, native bees and pollination
   Amy Dreves, Assistant Professor, pest management of horticultural, field and oilseed crops
   Silvia Rondon, Associate Professor, pest management in irrigated crops
   Stuart Reitz, Professor, Extension, insect pest management in irrigated crops
   Paul Marquardt, Assistant Professor, insect pest management, transgenic crops, insect behavior

Horticulture
   Ramesh Sagili, Assistant Professor, honey bee nutrition and health
   Vaughn Walton, Associate Professor, pest management in vineyards and hazelnuts
   Jana Lee (Courtesy), biological-based pest management
   John Lambrinos, Associate Professor, landscape ecology
   Gail Langellotto, Assistant Professor, urban entomology
   Louisa Hooven, circadian rhythms in insects
Jeffrey Miller, Professor, insect biodiversity, biological control, Lepidoptera/caterpillars biology
Peter W. Shearer, Professor, tree fruit entomology and toxicology
Robin Rosetta, Associate Professor, pest management in horticultural crops

Botany and Plant Pathology
Peter McEvoy, Professor, ecology, biological control of invasive plants
Andrew Moldenke, Professor, soil invertebrates, pollination ecology, native bees
Len Coop, Assistant Professor, IPM decision support systems

Environmental and Molecular Toxicology
Paul Jepson, Professor, ecotoxicology, epidemiology, field ecology

Fisheries and Wildlife
Sandy DeBano, Associate Professor, riparian ecology, terrestrial invertebrates
David Wooster, Associate Professor, stream ecology, aquatic invertebrates

Forest Engineering, Resources and Management
David Shaw, Associate Professor, forest entomology, forest health/protection

Zoology
David Lylte, Associate Professor, evolutionary ecology, aquatic insects
David Maddison, Professor, insect Systematics
Jaga Giebultowicz, Professor, insect Physiology, circadian clocks
Chris Marshall, Curator, Arthropod Museum, insect systematics

Facilities
OSU Branch Experiment Stations
OSU Extension Offices
Hyslop Farm
Lewis Brown Farm
Vegetable Farm
State of the art laboratories: on- and off-campus
West Greenhouse
IPPC facilities—library, meeting room

Requirements – 12 credits from the following list

ENT 507. Seminar (1-2)
ENT/HORT 518. Current Topics in Entomology (2)
ENT 520. Insect Ecology (3)
ENT 542. Principles of Integrated Pest Management: Systems Design (4)
ENT/Z 547X. Insect Systematics: Diversity and Evolution (5)
ENT 599. Special Topics: Explorations in OSU Entomology (2)
Z 540. Insect Physiology (3)
1. Review - College Approver - Agricultural Sciences

Approved by Penelope Diebel Assistant Dean / College of Ag Admin, December 4, 2013 4:50am

Comments

Penelope Diebel (College Approver - Agricultural Sciences) November 26, 2013 8:18am
The College of Agricultural Sciences supports the creation of this graduate option for the Crop Science degree.

Penelope Diebel (College Approver - Agricultural Sciences) December 4, 2013 4:50am
The College of Agricultural Sciences supports the addition of these graduate options.

2. Review - Curriculum Coordinator

Approved by Sarah Williams Coord-Curriculum / Acad Prgms/Assess/Accred, December 5, 2013 4:17pm

Comments

Sarah Williams (Curriculum Coordinator) December 5, 2013 4:17pm
This proposal seeks to create a new graduate option, Entomology, within the M.S. and Ph.D. degrees in Horticulture.

Please note that liaison comments are attached as a document. The proposal was originally created before graduate options became a feature of the CPS, and was entered as an undergraduate option as a workaround.