Dear Leslie,

Below, please find Entomology's response to the questions you had about conversion to semesters.

Susan Fisher

Question 1, part 1: The entomology faculty thoroughly considered the decision to remove the Organic Chemistry and Calculus 2 courses from the entomology major requirements. The current requirement for Calculus-2 and Organic under the quarter system is typical of all majors in the other departments in the College of Biological Sciences, which was entomology's academic home until last year. Now that we moved to the College of FAES, our proposed dropping of calculus-2 and organic chem would make us similar to other majors in CFAES, which do not require these courses. We consulted with current and former students and ultimately determined that majors would not be adversely affected by the removal of these requirements. Students are still required to take General Chemistry and Calculus 1. Moreover, for those students considering graduate school, we still recommend that they take Calculus 2 and Organic Chemistry as electives.

Question 1, part 2: Our primary distance ed course is 4600. The 4600 course is not for our majors; it is a support course. It serves as a pre-requisite for any of the 7 applied entomology courses for majors from other related departments. Establishing 4600 as a distance ed class gives more flexibility in when it is offered and allows us to reach non-traditional students who do not live in Columbus but who can attend one long class per week. We will offer 4600 in the first 7 weeks of both autumn and spring semesters. It leads into the applied courses held in the second 7 weeks. Moreover, some of the applied classes will have the lecture component as distance ed, but all will meet in person for the lab component. Because our department is co-located at the main campus in Columbus and at Wooster, we regularly use distance learning technologies for courses, guest lectures, and department meetings. We anticipate a very smooth transition to the distance education format for 4600.

Question 2: Graduate student advising will remain a cornerstone of our department. Our advising plan has two parts: we will disseminate general information about the transition to all graduate students and make that same information available on our department website. In addition to the on-going advising, each advisor will also have a follow up conversation with each of his/her advisees specifically to address any individual concerns. Our graduate student club recently met and reviewed our current transition plan, and reported that they would like to see a plan with much more detail. The entomology curriculum committee agrees with this
need, and plans to put together a more detailed version by the start of spring quarter 2011.

Dear Linda,

I am writing on behalf of the Council of Academic Affairs in regards to the process of semester conversion. I am the Chair of the Subcommittee that is responsible for reviewing the proposals from the College of FAES. We are hoping that we can bring the Entomology proposals to the entire CAA at our next meeting on Wednesday but we need answers to a few quick questions as soon as you are able. I'm sorry to both you with this, rather than someone directly in Entomology, but there was not a representative from Entomology listed on our contact sheet.

Overall, we were very impressed with the proposals coming from Entomology. They were extremely well thought out and conceived, and on the graduate level we were especially impressed with their efforts to incorporate students in the process.

As such, we just have a few questions:

1. In regards to the BS, do the faculty have concerns about the impact that the removal of the chemistry and calculus requirement might have on students? In addition, it seems that some required courses will be distance-learning courses; can they clarify the rationale for that?

2. On the graduate level, we had a slight concern about the transition plan. We liked the course plans, but we felt that they didn't make clear exactly what the process of advising would be. We want to hear them re-affirm the university's commitment that students will not be harmed by the transition.

Can you or someone in Entomology address these concerns for us?

Best, Leslie

--

Leslie M. Alexander, Ph.D.
Associate Professor
Department of History
The Ohio State University
Leslie M. Alexander, Ph.D.
Associate Professor
Department of History
The Ohio State University
Fiscal Unit/Academic Org
Entomology - D1130
Administering College/Academic Group
Food, Agric & Environ Science
Co-administering College/Academic Group
Semester Conversion Designation
New Program/Plan
Proposed Program/Plan Name
Entomology Graduate Minor
Type of Program/Plan
Graduate minor
Program/Plan Code Abbreviation
ENTMLGY
Proposed Degree Title

Credit Hour Explanation

<table>
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<tr>
<th>Program credit hour requirements</th>
<th>A) Number of credit hours in current program (Quarter credit hours)</th>
<th>B) Calculated result for 2/3rds of current (Semester credit hours)</th>
<th>C) Number of credit hours required for proposed program (Semester credit hours)</th>
<th>D) Change in credit hours</th>
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<tr>
<td>Total minimum credit hours required for completion of program</td>
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<td>Required credit hours offered by the unit</td>
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<td>Maximum</td>
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<tr>
<td>Required credit hours offered outside of the unit</td>
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<td>Maximum</td>
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<td>Required prerequisite credit hours not included above</td>
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<td>Maximum</td>
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Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

- An advanced understanding of insect biology at the molecular, biochemical, organismal, population, community, and ecosystem levels.
- Holistic framework for understanding sustainability in ways that cross disciplinary boundaries from entomology to other natural, physical, economic and social sciences.
- A conceptual understanding of human and natural ecosystems through the lens of insect science.
- An appreciation of threats and ecosystem services attributed to anthropods and how these shape scientific discovery, policy, and management decisions.
- An understanding of the history and the nature of science including the generation and application of new knowledge, including discovery and hypothesis testing.
- Demonstrated ability to apply a set of critical thinking tools to issue-based cross-disciplinary work and to communicate their thinking and analysis.
- An appreciation and familiarity with the philosophy of the land grant system, its history and its mission.
- An ethical framework for inquiry and action in science and society that includes entrepreneurship and business; collaboration, political and community engagement; and environmental stewardship.
Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

* ENTOMOLOGY GRADUATE MINOR.docx: Grad Minor Description
  (Program Proposal: Owner: Grewal, Parminder S)

Comments

* The program code full abbreviation should be ENTMLGY-GM (by Welly, Celeste on 12/07/2010 10:20 PM)

Workflow Information

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<th>Date/Time</th>
<th>Step</th>
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<td>12/10/2010 03:49 PM</td>
<td>Submitted for Approval</td>
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<td>Fisher, Susan Warwick</td>
<td>12/11/2010 11:30 AM</td>
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<td>Myers, Dena Elizabeth</td>
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<td>Soave, Melissa A</td>
<td>01/19/2011 10:10 AM</td>
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Program Proposal

Graduate Minor in Entomology

The Department of Entomology

College of Food, Agriculture, and Environmental Sciences

November 2010
Office of Academic Affairs  
203 Bricker Hall  
190 North Oval Mall  
Columbus, Ohio 43210

Wednesday, November 9, 2010

To whom it may concern:

The Department of Entomology currently consists of 4 programs: an undergraduate Major in Entomology, an undergraduate minor in Entomology, a Master of Science in Entomology and a Doctor of Philosophy in Entomology. All four programs will remain in the semester system with modifications to each. In addition one new program and one revised program will be added; the new program is a graduate minor in Entomology, and the revised program is the undergraduate major in Plant Health Management, which we are now joining in collaboration with Plant Pathology. The following document describes the proposed **Graduate Minor in Entomology** within the College of Food, Agricultural and Environmental Science to begin in Summer of 2012.

The Graduate Minor in Entomology will require 10 credit hours of course work. The students would be able to select any four courses from the combined list of entomology fundamentals, hands-on methods, and electives courses.

The faculty in the Department of Entomology met on June 17, 2010 in a retreat specifically designed to discuss the transition to semesters. At the retreat the graduate program curricula was determined. The faculty since has reviewed the curricula, learning outcomes, rationale, assessment plan, transition policy, and semester course list for all semester programs. A vote was conducted by the faculty on November 23, 2010. The vote for the proposal was a unanimous yes (13/13). Subsequently, we forwarded the proposal to the College of Food, Agricultural, and Environmental Science for review.

Sincerely,

Dr. Susan Fisher  
Chair and Professor  
Department of Entomology
Rationale statement for the Graduate Minor in Entomology program

The new Graduate Minor in Entomology is based on entomological coursework and is available to any student enrolled in either an MS or Ph.D. degree in any department other than entomology at the Ohio State University. We see the need for such a minor as many students are now looking for a broader training beyond their majors. Entomology is also an excellent choice for a graduate minor because it can provide potential job opportunities for graduates as specialists in Entomology and also because insects serve as excellent model systems for fundamental research. This graduate minor will be of particular interest to students enrolled in graduate programs in Horticulture and Crop Science, Plant Pathology, the School of Environment and Natural Resources, Animal Sciences, the medical and veterinary schools, and the Environmental Science Graduate Program (ESGP). For example, ESGP students who work with entomology faculty would tremendously benefit from the entomology minor as they would acquire a lot more in-depth fundamental knowledge about insects and how to work with them. Such disciplinary depth is expected of all interdisciplinary scientists according to a recent study on interdisciplinary training by the National Academies of Sciences. Our new and improved entomology courses have been designed to provide a solid understanding of entomology to graduate students. Students seeking a Graduate Minor in Entomology will be required to take at least 10 credits of coursework in entomology.

List of Semester courses
All students seeking a Graduate Minor in Entomology will take at least 10 credit hours of coursework from the following list of entomology courses:

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<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Term</th>
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<tr>
<td>ENT 5110</td>
<td>Ecology and management of Pathogens and Insects Affecting Trees in Forest and Urban Environments</td>
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<td>ENT 5120</td>
<td>Aquatic Insect Biology</td>
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<td>ENT 5130</td>
<td>Field Insect Taxonomy</td>
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<td>ENT 5420</td>
<td>Insect Behavior</td>
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<td>ENT 5500</td>
<td>Biological Control of Insect Pests</td>
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</tr>
<tr>
<td>ENT 5600</td>
<td>Principles and Applications of Integrated Pest Management</td>
<td>3.0</td>
<td>Autumn</td>
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<tr>
<td>ENT 5623</td>
<td>Insect Morphology</td>
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<td>Spring</td>
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<tr>
<td>ENT 5800</td>
<td>Pesticide Science</td>
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<tr>
<td>ENT 6310</td>
<td>Insect Physiology and Molecular Biology</td>
<td>3.0</td>
<td>Spring</td>
</tr>
<tr>
<td>ENT 6410</td>
<td>Insect Ecology and Evolutionary Processes</td>
<td>3.0</td>
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<tr>
<td>ENT 6701</td>
<td>Biodiversity Analysis for Ecosystem Sustainability &amp; Resilience</td>
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<td>ENT 6702</td>
<td>Entomological Techniques and Data Analysis</td>
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<td>ENT 6703</td>
<td>Molecular Techniques and Data Analysis</td>
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<td>ENT 6704</td>
<td>Systems Analysis from molecules to ecosystems</td>
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