

From: Soave, Melissa
To: Soave, Melissa
Subject: FW: Fwd: FW: Council on Academic Affairs Semester Conversion
Date: Wednesday, February 23, 2011 6:58:10 PM

----- Forwarded message -----

From: Susan Fisher <14.fisher@gmail.com>
Date: Tue, Feb 22, 2011 at 8:48 PM
Subject: Fwd: Fwd: FW: Council on Academic Affairs Semester Conversion
To: alexander.282@gmail.com

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

Status: PENDING

PROGRAM REQUEST
M.S. in Entomology

Last Updated: Myers,Dena Elizabeth
01/19/2011

Fiscal Unit/Academic Org	Entomology - D1130
Administering College/Academic Group	Food, Agric & Environ Science
Co-administering College/Academic Group	
Semester Conversion Designation	Re-envisioned with significant changes to program goals and/or curricular requirements (e.g., degree/major name changes, changes in program goals, changes in core requirements, structural changes to tracks/options/courses)
Current Program/Plan Name	Entomology
Proposed Program/Plan Name	M.S. in Entomology
Program/Plan Code Abbreviation	ENTMLGY-MS
Current Degree Title	Master of Science

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		45	30.0	30	0.0
Required credit hours offered by the unit	Minimum	30	20.0	19	1.0
	Maximum	50	33.3	30	3.3
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	0	0.0	0	0.0
Required prerequisite credit hours not included above	Minimum				
	Maximum				

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.

Status: PENDING

PROGRAM REQUEST
M.S. in Entomology

Last Updated: Myers,Dena Elizabeth
01/19/2011

Program Learning Goals

- Students will achieve an understanding of insect biology at the molecular, cellular, organ, organismal, population, community, ecosystem, and biosphere levels and their interconnections to discover system-level phenomena.
- Students will achieve a holistic understanding of managed and natural ecosystems using insects as models.
- Students will achieve a holistic understanding of sustainability in ways that cross disciplinary boundaries from entomology to natural, physical, economic and social sciences.
- Students will achieve an appreciation of the threats and ecosystem services attributed to insects and how these can shape scientific discovery, policy formation, and resource management decisions.
- Students will achieve an understanding of theory, principles, and tactics of integrated management of insects as pests.
- Students will achieve an understanding of the history and the nature of science including the generation and application of new knowledge, including discovery and hypothesis testing.
- Students will achieve an ethical framework for inquiry and action in science and society that includes entrepreneurship and business; collaboration, political and community engagement; and environmental stewardship.
- Students will achieve a demonstrated ability to apply quantitative and critical thinking skills to issue-based cross-disciplinary work and to communicate effectively to multiple audiences.
- Students will achieve an experience-based literacy in current techniques for outreach, engagement and classroom teaching.
- Students will achieve an appreciation and familiarity with the outreach and engagement mission of the land grant system, and its history to the service of society.

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? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)

Standardized tests

- Local comprehensive or proficiency examinations

Classroom assignments

- Embedded testing (i.e. specific questions in homework or exams that allow faculty to assess students' attainments of a specific learning goal)
- Other classroom assessment methods (e.g., writing assignments, oral presentations, oral exams)

Evaluation of a body of work produced by the student

- Practicum, internship or research evaluation of student work

Direct assessment methods specifically applicable to graduate programs

- Thesis/dissertation oral defense and/or other oral presentation

INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)

Surveys and Interviews

- Employer feedback or survey
- Student evaluation of instruction

Status: PENDING

PROGRAM REQUEST
M.S. in Entomology

Last Updated: Myers,Dena Elizabeth
01/19/2011

- Student interviews or focus groups

Additional types of indirect evidence

- External program review

USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)

- Meet with students directly to discuss their performance
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course content
- Make improvements in course delivery and learning activities within courses
- Make improvements in learning facilities, laboratories, and/or equipment
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

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

- CurriculumMapEntomolGrad.pdf: learning objectives
(Curricular Map(s). Owner: Welty,Celeste)
- EntomologyProgram_MS(final).pdf: MS program, final
(Program Proposal. Owner: Welty,Celeste)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Welty,Celeste	11/12/2010 02:01 PM	Submitted for Approval
Approved	Fisher,Susan Warwick	11/12/2010 04:42 PM	Unit Approval
Revision Requested	Stokoe,Laurie Anne	11/15/2010 03:52 PM	College Approval
Submitted	Welty,Celeste	12/10/2010 03:46 PM	Submitted for Approval
Approved	Fisher,Susan Warwick	12/11/2010 11:31 AM	Unit Approval
Approved	Stokoe,Laurie Anne	01/14/2011 04:23 PM	College Approval
Approved	Myers,Dena Elizabeth	01/19/2011 10:15 AM	GradSchool Approval
Pending Approval	Soave,Melissa A	01/19/2011 10:15 AM	CAA Approval

Program Proposal

Master of Science in
Entomology

The Department of Entomology

College of Food, Agricultural, and
Environmental Sciences

November 2010



Department of Entomology

College of Food, Agriculture and Environmental Sciences
202 Kottman Hall
2021 Coffey Rd.
Columbus, OH 43210

Phone (614) 292-8209

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 offers four 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 are proposed; 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 is the proposed program for a **Master of Science in Entomology** with Plan A (thesis) and Plan B (non-thesis) options within the College of Food, Agricultural and Environmental Sciences, which will begin with the transition to semesters in the summer of 2012. Currently the Master of Science degree in Entomology is a two-year program. When we convert to semesters, the time requirement and the name of the degree will remain the same.

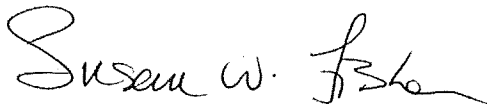
The Master of Science in Entomology has been completely re-envisioned based on a thorough review of our graduate teaching in Entomology. Following our Department's external (CSREES) and internal reviews, I established an Adhoc Curriculum Committee in 2005 to critically examine our graduate teaching program and propose a new curriculum. The committee lead by Professor Parwinder Grewal examined the course enrollment data, course syllabi, and national trends to determine whether our course offerings were meeting the educational needs of our students. The committee also conducted a comprehensive electronic survey to assess the curriculum and non-curriculum academic needs and expectations of our graduate students. In its report submitted to the department, the committee found that the then OSU Entomology course offerings to be attractive and comparable to most Entomology departments nationwide, but it noted that improvements were needed to move OSU to the top of Entomology Graduate Programs in the nation. The committee presented its findings to the department and proposed a fundamentally new approach to graduate training in Entomology. The new approach, *ecosystem to molecule training in entomology*, envisions the most comprehensive graduate training with learning opportunities for each student ranging from molecule to ecosystem along with professional development skills needed to succeed in today's world. Since then Entomology faculty have met several times to discuss/debate the new curriculum proposal.

The re-envisioned M.S. program with thesis option (Plan A) will consist of 19 credit hours of required core course work, not including research hours. The core courses for Plan A option will include three entomological fundamentals courses, at least two 'hands-on' research methods and two professional development skills courses, and ENTMLGY 8990 Research credits (any number). The re-envisioned M.S. program with non-thesis option (Plan B) will consist of 28 credits of required core course work, which will include at least three additional 5000 level courses from our electives. The Plan B option will also require at least one ENTMLGY

6193 Individual Studies course in which the student will submit a comprehensive review on an entomological subject of his/her interest. All M.S. students in both Plan A and B options will also be required to take one ENTMLGY 8800 Research and Training Seminar (1 credit) and one ENTMLGY 8000 Entomology Seminar (1 credit). Our students will be highly advised by both faculty and staff. We will help guide the students to develop a plan that fits their career goals.

The faculty has asked for the assistance of many graduate students in developing a proper curriculum for students in the semester system. By communicating via e-mail and at departmental meetings, we have received feedback on course load, what courses to take, when to take them, and scheduling issues. The graduate students have also helped develop the transition plan. The faculty in the Department of Entomology met on March 10, 2010 in a retreat designed to develop learning objectives for both our graduate and undergraduate programs. The faculty in the Department of Entomology met again on June 17, 2010 in a retreat specifically designed to discuss the transition to semesters. At the retreat, the graduate program curricula were determined. The faculty since has reviewed the curricula, learning outcomes, rationale, assessment plan, transition policy, semester course list, and curriculum maps 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 are forwarding the proposal to the College of Food, Agricultural, and Environmental Science for review.

Sincerely,

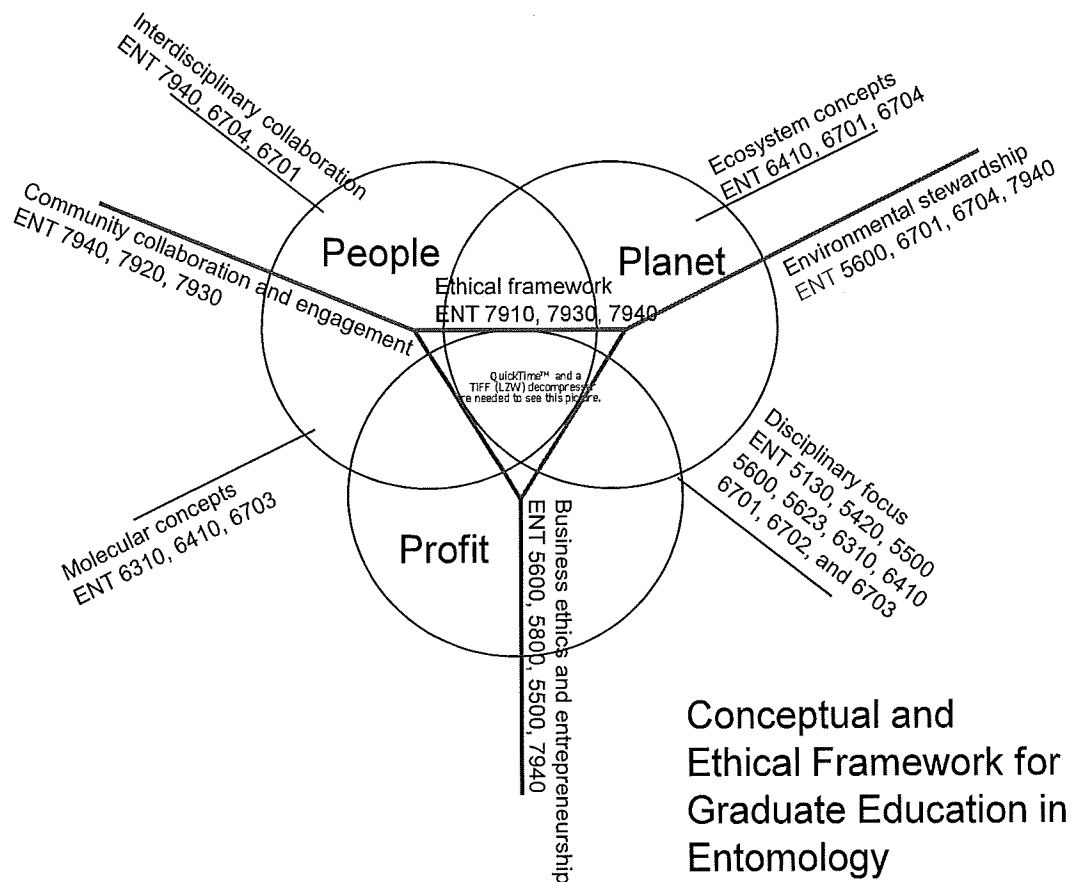
A handwritten signature in cursive script that reads "Susan W. Fisher". The signature is written in black ink and is positioned below the word "Sincerely,".

Dr. Susan Fisher
Professor and Chair
Department of Entomology

Rationale Statement for the proposed Master of Science in Entomology program

Insects are the largest existing group of living organisms on Planet Earth and, while largely unappreciated, are arguably the most impactful. Insects are highly adaptable and can be found in virtually all terrestrial and fresh water habitats. Some have major adverse impacts on human activities: destroying crops, food supplies, structures, and natural resources, transmitting diseases, or simply being annoyances. However, the vast majority of insects are considered beneficial: providing pollination services, being primary consumers of dead plants and animals, controlling their own kind (parasites and predators), and even serving as food. Insects have served as major scientific models in studies of genetics, behavior, physiology and population dynamics.

Due to these multiple roles of insects, students with a Master of Science in Entomology degree are in great demand in government and industry sectors. Following comprehensive external and internal reviews of our graduate teaching program and the work of the Adhoc Curriculum Committee, our department adopted a new approach, *ecosystems to molecules as a framework for graduate student training in entomology* with learning opportunities for each student ranging from molecule to ecosystem along with professional development skills needed to prepare students to matriculate into positions in industry, government, or academia (teaching). Therefore, the proposed curriculum and associated professional development activities are aimed at training the whole scientist rather than just preparing a specialist with disciplinary knowledge. The redesigned curriculum includes courses in entomological fundamentals, hands-on research methods that use a team project approach and professional development skills fully aligned with the re-envisioned learning objectives and the conceptual and ethical framework (as shown graphically in the figure below). Several of these courses are new and the others have been revised. In the proposed curriculum, all M.S. students will be required to take all three entomological ‘fundamentals’ courses, at least two of the ‘hands-on research methods’ courses and at least two of the ‘professional development skills’ courses.



List of Semester courses for M.S. Plan A (thesis option) and Plan B (non-thesis) options

All students seeking a **Master of Science in Entomology (Plan A)** are required* to take:

All **three** from the following list of Entomology Fundamentals courses (9 credits)

Course	Title	Credits	Term
ENTMLGY 6310	Insect Physiology and Molecular Biology	3	Spring
ENTMLGY 6410	Insect Ecology and Evolutionary Processes	3	Autumn
ENTMLGY 5130	Field Insect Taxonomy	3	Summer

At least **two** from the following list of Hands-on Research Methods in Entomology courses (4 credits)

Course	Title	Credits	Term
ENTMLGY 6701	Biodiversity Analysis for Ecosystem Sustainability & Resilience	2	Summer
ENTMLGY 6702	Entomological Techniques and Data Analysis	2	Autumn
ENTMLGY 6703	Molecular Techniques and Data Analysis	2	Spring
ENTMLGY 6704	Systems Analysis from Molecules to Ecosystems	2	Spring

At least **two** from the following list of Professional Development Skills courses (4 credits)

Course	Title	Credits	Term
ENTMLGY 7910	The Nature and Practice of Science	2	Autumn
ENTMLGY 7920	Presentation Skills for Scientists	2	Autumn
ENTMLGY 7930	Scientific Writing and Grant Proposal Development	2	Spring
ENTMLGY 7940	Interdisciplinary Research, Leadership and Team Work	2	Spring

*Petitions to the Graduate Studies Committee can be made to exclude any course if the student can provide evidence of a similar course taken at OSU or elsewhere.

All M.S. students are also required to take one ENTMLGY 8800 Research and Training Seminar (1 credit) and one ENTMLGY 8000 Entomology Seminar (1 credit) courses

Total number of required course credits = 19
 Number of elective and research credits = 11
 Total number of required credits =30

Electives

In addition to the above requirements students may choose any number of elective courses based on their interest or recommendations by their advisory committee. These electives may include ENTMLGY 7890 (Special Topics), ENTMLGY 6193 (Individual Studies), ENTMLGY 6194 (Group Studies), any of the ENTMLGY 5000 series courses, courses offered in other units, and ENTMLGY 8999 (Research Credits) to fulfill the graduate school requirements.

Electives offered by our unit

Course	Title	Credits	Term
ENTMLGY 5110	Ecology and Management of Pathogens and Insects Affecting Trees in Forest and Urban Environments	3	Autumn
ENTMLGY 5120	Aquatic Insect Biology and Ecology	3	Summer
ENTMLGY 5420	Insect Behavior	3	Spring
ENTMLGY 5500	Biological Control of Arthropod Pests	3	Autumn
ENTMLGY 5600	Principles and Applications of Integrated Pest Management	3	Autumn
ENTMLGY 5623	Insect Morphology	2	Spring
ENTMLGY 5800	Pesticide Science	3	Spring

ENTMLGY 6193	Individual Studies	1-3	Any
ENTMLGY 6194	Group Studies	1-3	Any
ENTMLGY 7890	Special Topics	1-2	Any

All students seeking a **Master of Science in Entomology (Plan B, non thesis)** are required* to take:

All **three** from the following list of Entomology Fundamentals courses (9 credits)

Course	Title	Credits	Term
ENTMLGY 6410	Insect Ecology and Evolutionary Processes	3	Autumn
ENTMLGY 6310	Insect Physiology and Molecular Biology	3	Spring
ENTMLGY 5130	Field Insect Taxonomy	3	Summer

At least **two** from the following list of Hands-on Research Methods in Entomology courses (4 credits)

Course	Title	Credits	Term
ENTMLGY 6701	Biodiversity Analysis for Ecosystem Sustainability & Resilience	2	Summer
ENTMLGY 6702	Entomological Techniques and Data Analysis	2	Autumn
ENTMLGY 6703	Molecular Techniques and Data Analysis	2	Spring
ENTMLGY 6704	Systems Analysis from Molecules to Ecosystems	2	Spring

At least **two** from the following list of Professional Development Skills courses (4 credits)

Course	Title	Credits	Term
ENTMLGY 7910	The Nature and Practice of Science	2	Autumn
ENTMLGY 7920	Presentation Skills for Scientists	2	Autumn
ENTMLGY 7930	Scientific Writing and Grant Proposal Development	2	Spring
ENTMLGY 7940	Interdisciplinary Research, Leadership and Team Work	2	Spring

At least **three** from the following elective courses

Course	Title	Credits	Term
ENTMLGY 5110	Ecology and Management of Pathogens and Insects Affecting Trees in Forest and Urban Environments	3	Autumn
ENTMLGY 5120	Aquatic Insect Biology and Ecology	3	Summer
ENTMLGY 5420	Insect Behavior	3	Spring
ENTMLGY 5500	Biological Control of Arthropod Pests	3	Autumn
ENTMLGY 5600	Principles and Applications of Integrated Pest Management	3	Autumn
ENTMLGY 5623	Insect Morphology	2	Spring
ENTMLGY 5800	Pesticide Science	3	Spring

*Petitions to the Graduate Studies Committee can be made to exclude any course if the student can provide evidence of a similar course taken at OSU or elsewhere.

All M.S. Plan B students are also required to take at least one ENTMLGY 8800 Research and Training Seminar (1 credit), one ENTMLGY 8000 Entomology Seminar (1 credit) course, and one ENTMLGY 6193 (Individual Studies) course in which he/she will submit a comprehensive literature review of an entomological subject.

Total number of required course credits = 27-28
 Number of elective credits = 2-3
 Total number of required credits = 30

Electives

In addition to the above requirements students may choose any number of elective courses based on their interest or recommendations by their advisory committee. These electives may include ENTMLGY 7890 (Special Topics), ENTMLGY 6194 (Group Studies), any of the other ENTMLGY 5000 series courses, or courses offered in other units.

Transition Policy

A student entering the Master of Science in Entomology program in Autumn 2010 should be able to finish coursework prior to the transition. A student entering the Entomology M.S. program in Academic Year 2011-2012 will spend up to one year in the current quarter system and subsequent terms in the new semester system. A suggested course plan is below.

A typical schedule for Entomology M.S. program in **Academic Years 2011-2013:**

Year	Term	Required Courses*	Possible Elective Courses
	Quarters		
1	Autumn 2011	880 (8880), 631 (6310)	
1	Winter 2012	694 (6704), 790 (7910)	494 (5800)
1	Spring 2012	694 (7940), 694 (7930)	660 (5600)
	Semesters		
2	Summer 2012	6701, 5130	5120 (612)
2	Autumn 2012	6410 (641), 7920	5110 (461), 5500 (650)
2	Spring 2013	6702, 6703, 7930	5420 (642), 5623

*8800, 5130, 6310, and 6410 are required of all students; students will choose at least two out of 6701, 6702, 6703, and 6704; and two out of 7910, 7920, 7930, and 7940.

During the transition period, the Entomology Graduate Studies Committee may allow substitutions of courses that are more appropriate for the student's individual graduate program.

Curriculum map for graduate Entomology courses: rated as **B** for beginning level, **M** for intermediate level, **A** for advanced level.

LEARNING OBJECTIVE >>>	1. Students will achieve an understanding of insect biology at the molecular, cellular, organ, organismal, population, community, and biosphere levels and their interconnections to discover system-level phenomena.	2. Students will achieve a holistic understanding of managed and natural ecosystems using insects as models.	3. Students will achieve a holistic understanding of sustainability in ways that cross disciplinary boundaries from entomology to natural, physical, economic and social sciences.	4. Students will achieve an appreciation of the threats and ecosystem services attributed to insects and how these can shape scientific discovery, policy formation, and resource management decisions.	5. Students will achieve an understanding of theory, principles, and tactics of integrated management of insects as pests.	6. Students will achieve an understanding of the history and the nature of science including the generation and application of new knowledge, including discovery and hypothesis testing.	7. Students will achieve an ethical framework for inquiry and action in science and society that includes entrepreneurship and business; collaboration, political and community engagement; and environmental stewardship.	8. Students will achieve a demonstrated ability to apply quantitative and critical thinking skills to issue-based cross-disciplinary work and to communicate effectively to multiple audiences.	9. Students will achieve an experience-based literacy in current techniques for outreach, engagement and classroom teaching.	10. Students will achieve an appreciation and familiarity with the outreach and engagement mission of the land grant system, and its history to the service of society.
COURSE V	ENT 5110	M	M	A	A	B	B	-	M	
V	ENT 5120	M	M	A	M	B	M	-	-	
	ENT 5130	-	M	-	M	M	M	M	-	
	ENT 5420	M	-	M	M	M	M	-	-	
	ENT 5500	M	A	A	A	A	M	B	M	
	ENT 5601	M	A	M	M	M	A	M	M	
	ENT 5604	M	M	M	M	M	A	M	M	
	ENT 5605	B	B	M	M	B	B	-	-	
	ENT 5623	A	-	B	-	-	B	-	-	
	ENT 5800	M	M	A	A	B	M	-	-	
	ENT 6310	A	-	-	-	A	-	A	-	
	ENT 6410	A	M	A	M	A	A	-	-	
	ENT 6600	-	M	M	A	-	M	M	A	
	ENT 6701	A	M	-	-	M	-	M	-	
	ENT 6702	A	-	M	-	A	A	-	-	
	ENT 6703	B	B	B	M	B	M	B	B	
	ENT 6704	A	A	A	M	M	A	-	-	
	ENT 7910	-	-	-	M	A	A	-	A	
	ENT 7920	-	-	-	-	-	B	A	A	
	ENT 7930	-	-	M	M	A	M	M	M	
	ENT 7940	A	A	A	A	A	A	A	A	
	ENT 7890	A	A	A	A	M	A	A	M	
	ENT 8000	A	A	A	A	A	A	A	A	
	ENT 8800	M	B	B	-	M	B	-	-	
	ENT 8999	-	-	-	-	A	-	-	-	

November 2010