

Date:	02/15/2017
	(MM/DD/YYYY)

Template For Development Of An Accelerated Bachelor's / Master's Program

1. Proposing College(s)/School	(s): College of Agriculture				
Department(s	Entomology and Plant Pathology	gy			
	*				
2. Program Coordinator(s):	David Held and Kathy Lawrence	e 3. Effective Term: Fa	II 2017		
4 Included Programs:	, DO Hartis DO Dial Cai DO Fe	anastus DC Cuan Cail Environ Cai			
4. Included Programs: Undergradua					
(e.g.: BA in English: Graduate: MA in English)	M.S. Plant Pathology, M.S. Ent	tomology, M.S. Agriculture			
o	tal number of credit hours (c.h.) programs undergraduate and gradua	Undergraduate: 120 Gradua	ate: 30		
6. Admission Qualifications: ⊠	Credit Hours Earned —— _{Minimu}	um: 45 Maximum: 96 At Aub	urn: 24		
the		be at least 45 c.h., and the maximum mu c.h. must have been earned at Auburn U			
nas set the minimum GFA	*		inversity.		
graduate programs at 3.4.	Grade Point Average	Major: 3.4			
Departments may set higher requirements as necessary.)	Minimum Grade in Gateway Cour	rse —— Course(s), Grade(s): 3.0			
7. Retention Standards:	Time Limit to Earn Degree ——	Undergraduate Program:			
(NOTE - The Graduate School		Graduate Program:			
has set the minimum GPA N o	OTE - Degrees must be earned within	n time limits set by the program (where	applicable)		
requirement for retention in ar graduate programs at 3.4.	nd the Graduate School				
	Grade Point Average ———	─ Major: 3.4			
	Minimum Grade in Major Course(s) —— Course(s), Grade(s): 3.4				
8. Graduate Course		Undergraduate Course	Credit		
Substitutions:	Graduate Course	Replaced	Hours		
(List all courses at the graduate level that will count for undergraduate	ENTM 6300	ENTM 5300	5		
credit in the program)	ENTM 6440	ENTM 5440	5		
NOTE - No more than 9 c.h. of graduate credit may be counted	ENTM 6360\6363	ENTM 5360\5363	4		
toward a student's undergraduate work, for graduate programs up to	ENTM 6220	ENTM 5220	4		
and including 35 c.h. total. For graduate programs of 36 c.h. or	ENTM 6330	ENTM 5330	4		
higher, no more than 12 c.h. of graduate credit may be counted	ENTM 7990	ENTM 4980	2-4		
toward a student's undergraduate work.	ENTM 6140	ENTM 5140	4		

(Indicate the maximum number of credit hours (c.h.) that may be double-counted, as per the guidelines listed above)

9. Maximum Double-Counted Hours: 9

10. Justification for Program:

The proposed program, an Accelerated Bachelors and Masters degree program in EPP, addresses the AU and CoA Mission statements in several ways. The programs at AU and the CoA are dedicated to providing the highest quality education to undergraduate and graduate students. Consistent with this is the commitment of the EPP Department to training graduate students that are job ready and competitive nationally and globally for the job market. Our faculty are national and international leaders in their disciplines. Their strengths in basic and applied techniques will give students breadth and depth to meet the demands of the expanding agribusiness marketplace. It is projected that between 2015 and 2020 about 57,900 positions, on average per year, will be available to highly trained students in food, agriculture, renewable resources, and the environment. The USDA has identified 4 core areas, Management and Business, Science and Engineering, Food and Biomaterials Production, and Education, Communication, and Governmental Services that will demand trained graduates. The interdisciplinary nature of entomology and plant pathology is an essential component of many of the occupations in each of these core areas. This new ABM will also require undergraduates to get research experience to complete the program, which will put them on the front lines of scientific discovery and innovations in many aspects of plant and biological sciences.

(Include a concise, yet adequate rationale for the proposal of the accelerated program -- citing such factors as market need, student demand, etc.)

11. Application Process:

Applicants will apply online to the Graduate School for admission into the ABM program. Applications will be reviewed by the graduate school and departmentally to ensure applicants meet the program requirements. Recommendations will be made by the program coordinators and approved by the departmental GPO and the Associate Dean for Instruction in Agriculture.

(Outline the process for acceptance into the accelerated program; include all necessary departmental, college, and other approvals that will be necessary)

12. Program Matriculation:

Undergraduates are expected to complete the B.S. degree in a similar time frame to undergraduates not in the program. Undergraduate students would substitute graduate level course equivalents as electives in the suggested majors. The program would take 12 or 18 months beyond the completion of the Bachelors degree to complete. The undergraduate program would take 4-5 years to complete with an additional 1-1.5 years if the student is in the ABM program.

(Provide a brief narration of the program, as it will be taken by students; include estimated timeframes for application to the graduate portion of the program, completion of the undergraduate portion of the program, and any internships/field experience)

13. Academic Advising:

Students will be assigned an academic advisor when admitted to the program. each student will have an advisory committee consisting of no less than 3 faculty members. The advisor and student will work closely to identify required graduate level courses and electives in the student's area of interest. Students will complete an M.S. Plan of Study and have it approved by their advisory committee.

(Address how academic advising for the student will be handled, from undergraduate program admission through completion of the accelerated program)

14. Withdrawal Process:

Undergraduates may withdraw voluntarily from the ABM program at any time by notifying, in writing, their advisor, the program coordinator, and the departmental GPO. A copy of the request will be sent to the Dean of the Graduate School. Students who withdraw from the program voluntarily or because they do not meet the program requirements will be awarded

graduate credit for double-counted courses.

(Outline both the process for withdrawing from the accelerated program, as well as the implications on matriculation and earning of undergraduate and graduate degrees)

15. Additional Information:

ENTM 4020 (Economic Entomology) or ENTM 3040 (General Entomology) will serve as gateway courses for ABM students in the Entomology track. Students must complete one of these two courses and receive a grade of 3.0 or better. For students in PLPA track, PLPA 3000 (General Plant Pathology) will serve as the gateway course. Similar to the Entomology course, a grade of 3.0 or better is required in this gateway course.

(Include any additional information regarding the accelerated program that may be pertinent to its review and approval)

Curriculum Models

(Please attach the proposed curriculum models for both the undergraduate and graduate components of the accelerated degree program; a current model for each may be provided as well, for comparative purposes)

\bigcap	<u>Approvals</u>	
Ramants		02-17-2017
Department Chair 7 Head		0/20/10/7
Leonard Bell		2/25/2011 Date
College / School Curriculum Committee		1 00/ 10
any Wint		2 · 28 · [1]
College / School Dean		Dale
		Date
Dean of the Graduate School		
Assoc. Provost for Undergraduate Studies		Date

Contact Person: David Held Telephone: 4-3818

E-Mail Address: dwh0004@auburn.edu Fax: 4-5005

ABM in Entomology

Example Curriculum for Student from COSAM:Biology: CONS track

There is a 16 h max for credit load requirements. This is not exceeded in this curriculum in semesters where the student is taking dual credit ABM courses. Student will begin the Graduate Course work in the Junior Year. In the Fall semester of the Junior Year, they would complete the Gateway course ENTM 3040. In spring of the Junior Year, they would select an ENTM Graduate course listed as an Eco\Evol\Diversity Elective. In their Senior year, students would accumulate 4 more hours in ENTM courses either Spring or Fall as electives. With this model, students would bring 9 graduate hours from their undergraduate curriculum, conduct research the first summer semester, conduct research the following fall and spring as well as complete the required coursework. The Master's degree in ENTM requires 30 hours with 21 of those in ENTM courses. With the following model, students will have 9 hours of graduate work in ENTM from their undergraduate curriculum, then achieve 18 more hours in fall and spring (9 hours each) with the balance in research hours during the Summer semester between the Senior year as an undergraduate and the first summer as a graduate student. Graduate courses in this curriculum are indicated in **BOLD**.

Freshman			
Fall Semester	Hours	Spring Semester	Hours
BIOL 1020 & BIOL 1021	4	BIOL 1030 & BIOL 1031	4
CHEM 1030	3	CHEM 1040	3
CHEM 1031	1	CHEM 1041	1
ENGL 1100	3	ENGL 1120	3
MATH 1610 Calculus I	4	Core History	3
		Core Social Science	3
Total	15	Total	17
Sophomore			
Fall Semester	Hours	Spring Semester	Hours
Core Fine Arts	3	Core Social Science\Humanities	3
Core Social Science	3	Core History or Literature	3
Core Humanities	3	BIOL 3060	4
Core Literature	3	BIOL 3030	3
BIOL 3000	4	CHEM 2030	3
Total	16	Total	16
Junior			
Fall Semester	Hours	Spring Semester	Hours
BIOL 4020	4	BIOL 5240	4
WILD 3280	3	Elective for ABM: ENTM 6440	5
BIOL 3100	4	BIOL 4100	3
ENTM 3040 (Gateway course)	4	PHYS 1000	4
Total	15	Total	16

Senior			—
Fall Semester	Hours	Spring Semester	Hours
BIOL elective	4	BIOL 5120	4
BIOL 5090	3	Elective options for ABM	4
BIOL 4010	4	BIOI elective	4
Free Elective:Option for ABM	4(2)	BIOL 4950	11
		STAT 2510	3
Total	15	UNIV 4AA0	0
10001		Total	16
Graduate			
Summer			T
Course	Hours	Course	Hours
ENTM 7990 Research\Thesis	1-5	Statistics course or ENTM grad	4
		course electives ^a	
Total	3-9		<u> </u>
Fall Semester			1.0
ENTM grad course electives ^a	8 max	ENTM 7990 Research\Thesis	1-6
Total	9		
Spring Semester			+
ENTM grad course electives ^a	8 max	ENTM 7990 Research\Thesis	1-6
ENTM 7950	1		
Total	9		

Entomology Graduate Program Core Requirements

ENTM 3040-gateway course

ENTM 6300 Systematic Entomology

ENTM 6440 Insect Morphology

ENTM 6200 Insect Physiology

ENTM 7950 Seminar (required enrollment in the final semester for MS students)

Statistics course (STAT 7000 AGRN 7080, or equivalent)

^aEntomology Graduate Course Electives

ENTM 4960 Special Problems in Entomology

ENTM 6030 Insecticides in the Environment

ENTM 6140 Aquatic Insects

ENTM 6150 Arachnology

ENTM 6220 Insect Ecology

ENTM 6330 Integrated Pest Management

ENTM 6340 Urban Forest Insects

ENTM 6360/6366 Landscape Entomology

ENTM 6370 Urban Entomology

ENTM 7100 General Toxicology

ENTM 7130 Biological and Microbial Control of Insects

ENTM 7190 Plant and Animal Interactions

ENTM 7330 Medical-Veterinary Entomology

ENTM 7930 Journal Review for Entomology and Plant Pathology

PLPA 7820 Research Proposal Writing

STAT 7000 Experimental Statistics

AGRN 6010/6016 Analysis of Plant, Soil, and Animal Data

ABM: Master's in Agriculture

Example Curriculum for Student from CoA: Horticulture

Two tracks, Nursery and Greenhouse, and Fruit and Vegetable Production are the best fits for an ABM in EPP. The Master of Agriculture (M.Ag) is a non-thesis option for students who do not wish to enter a doctoral program. The Master of Agriculture degree requires at least 32 semester hours of course work, 21 of which must be in ENTM or PLPA, with the remainder of credit hours taken from other, related areas as determined by the student's Advisory Committee. In the following curriculum students complete the gateway courses in their Junior year and begin taking ABM courses in the senior year. Students will bring 9 hours from undergraduate and complete coursework in the following summer, fall, and spring semesters. Graduate courses are indicated in **BOLD**.

Freshman	Hours	Spring Semester	Hours
Fall Semester		BIOL 1030 & BIOL 1031	4
HORT 1010	1 3-4	CHEM 1030	3
Core MATH			1
BIOL 1020/1021	4	CHEM 1031	3
ENGL 1100	3	ENGL 1120	3
Core History sequence I	3	Core History sequence II	3
Total	14-15	Total	14
Sophomore			
Fall Semester	Hours	Spring Semester	Hours
HORT 3220		COMM 1000	3
Social Science Choice	3	Core Literature II or Humanities	3
Social Science Shares		Choice	
ECON 2020/2030	3	HORT 2240	3
Core Literature I	3	HORT 3210	4
AGRN 2040	4	Free Electives	3-4
Total	17	Total	16-17
Junior			
Fall Semester	Hours	Spring Semester	Hours
HORT 3000	3	ENTM 4020 (Gateway course)	4
HORT 3950	1	HORT 4100	4
Group 1 elective	3-4	Group 1 elective	3-4
PLPA 3000 (Gateway course)	4	Core Fine Arts	3
AGRN 3150	4		
Total	15-16	Total	14-15
	-		
Senior			Tee
Fall Semester	Hours		Hours
HORT 5220	4	Group 2 elective	3-4
HORT 5230	4	Free electives (used for ABM)	7-13

Group 1 elective	3-4	PLPA\ENTM 4960	1
Group 2 elective (PLPA 6060)	3		
Total	14-16	Total	11-17

Graduate			
Summer			
Course	Hours	Course	Hours
ENTM 7990 Research\Thesis	1-5	Statistics course or grad course electives ^a	4
Fall Semester		Spring Semester	
Graduate level course electives ^b	8 max	Graduate level course electives ^b	8 max
ENTM 7990 Research\Thesis	1-5	ENTM 7990 Research\Thesis	1-5
		ENTM 7950	1 1
	\		

Graduate Program Core Requirements

ENTM 7950 Seminar (required enrollment in the final semester for MS students) Statistics course (STAT 7000 AGRN 7080, or equivalent)

^aSummer electives

ENTM 6360, PLPA 5050, PLPA 6206, PLPA 6506, PLPA 7080

^bGraduate Course Electives

PLPA 6050 Plant Disease Diagnosis

PLPA 6200/6206 Introductory Mycology

PLPA 6400 Plant Virology

PLPA 6500/6506 Plant Nematology

PLPA 6920/ENTM 6920 Internship

PLPA 7080 Field Survey of Plant Pathology

PLPA 7300 Plant-Bacterial Interactions

PLPA 7820 Research Proposal Writing

PLPA 7860 Plant Disease Epidemiology

PLPA 7861 Plant Disease Epidemiology Laboratory

PLPA 7900/ENTM 7900 Directed Studies

PLPA 7960/ENTM 7960 Special Problems

ENTM 6300 Systematic Entomology

ENTM 6440 Insect Morphology

ENTM 6200 Insect Physiology

ENTM 6030 Insecticides in the Environment

ENTM 6140 Aquatic Insects

ENTM 6150 Arachnology

ENTM 6220 Insect Ecology

ENTM 6330 Integrated Pest Management

ENTM 6340 Urban Forest Insects

ENTM 6360/6366 Landscape Entomology

ENTM 6370 Urban Entomology

ENTM 7100 General Toxicology

ENTM 7130 Biological and Microbial Control of Insects

ENTM 7190 Plant and Animal Interactions

ENTM 7330 Medical-Veterinary Entomology

ENTM 7930 Journal Review for Entomology and Plant Pathology

STAT 7000 Experimental Statistics

AGRN 6010/6016 Analysis of Plant, Soil, and Animal Data

ABM: Master's in Plant Pathology

Example Curriculum for Student from CoA: CSES, Turfgrass Option

There are three tracks in CSES and only the Turfgrass option has the available electives or free electives to fit with an ABM in EPP. Student will begin the Graduate Course work in the Senior Year. In the Fall semester of the Junior Year they would complete the Gateway course PLPA 3000. In their Senior year, students would accumulate 7-8 hours in PLPA courses in both the Spring or Fall as Plant\Soil electives. With this model, students would bring 7-8 graduate hours from their undergraduate curriculum, conduct research the first summer semester, conduct research the following fall and spring as well as complete the required coursework. The Master's degree requires 30 hours with 21 of those in PLPA courses. With the following model, students will have 7-8 hours of graduate work in ENTM from their undergraduate curriculum, then achieve the remaining hours during the one years as a graduate student (fall and spring semesters) as well as the Summer semester between the Senior year as an undergraduate and the first summer as a graduate student. Graduate courses in this curriculum are indicated in **BOLD**.

Freshman	Havina	Chrina Comostor	Hours
Fall Semester	Hours	Spring Semester	4
BIOL 1020 & BIOL 1021	4	BIOL 1030 & BIOL 1031	3
CHEM 1030	3	CHEM 1040	
CHEM 1031	1	CHEM 1041	1
AGRN 1000	4	ENGL 1100	3
MATH 1130	3	AGRN 2040	4
Total	15	Total	15
Summer Semester			
ENGL 1120	3		
Core History I	3		
FLSP 1010	4		
Free electives			
_			
Sophomore	Harris	Carina Compostor	Hours
Fall Semester	Hours		3-4
Core Humanities (English Lit.)	3	BIOL 3100 or HORT 3000	3-4
AGRN 3150	4	CHEM 2030	
AGRN 3120	4	Core History II	3
AGRN 3200	3	ECON 2020	A CONTRACTOR OF THE PARTY OF TH
		Core Social Science	3
Total	14	Total	15-16
	1		1

Junior			т
Fall Semester	Hours	Spring Semester	Hours
Core Humanities	3	AGRN 3920 Internship	3
PLPA 3000 (Gateway course)	4		
AGRN 5000	3		
BSEN 3560	3		
Humanities choice	3		
Total	16	Total	3
Coming			
Senior Fall Semester	Hours	Spring Semester	Hours
Plant/Soil Elective (could be	4	AGRN 5020	3
ABM course)	T	7.0.00	
ACCT 2810	3	AGRN 5160	3
STAT 2510	3	AGRN 5180	3
Core Humanities	3	Plant/Soil Elective (could be	3
Core numanities		ABM course)	
AGRN 4950	2	ENTM 4020	4
PLPA 4960	1		
Total	16	Total	16
Graduate			
Summer			
Course	Hours	Course	Hours
PLPA 7990 Research\Thesis	1-5	PLPA 7080, 5050, or statistics course	3-4
Total	3-9		
Fall Semester			
PLPA course electives ^a	3-7	PLPA 7990 Research\Thesis	1-5
Total	6-9		
		•	
			T."
Spring Semester			
	3-7	PLPA 7990 Research\Thesis	1-5

Plant Pathology Graduate Program Core Requirements

Each student must take PLPA 6200 plus any 2 other courses from the list:

PLPA 6200 Mycology

PLPA 6300 Plant-bacterial interactions

PLPA 6400 Plant Virology

PLPA 6500 Plant Nematology
PLPA 7950 Seminar (required enrollment in the final semester for MS students)

^aGraduate Course Electives

PLPA 6050 Plant Disease Diagnosis

PLPA 6200/6206 Introductory Mycology

PLPA 6400 Plant Virology

PLPA 6500/6506 Plant Nematology

PLPA 6920/ENTM 6920 Internship

PLPA 7080 Field Survey of Plant Pathology

PLPA 7300 Plant-Bacterial Interactions

PLPA 7820 Research Proposal Writing

PLPA 7860 Plant Disease Epidemiology

PLPA 7861 Plant Disease Epidemiology Laboratory

PLPA 7900/ENTM 7900 Directed Studies

PLPA 7960/ENTM 7960 Special Problems

PLPA 7930 Journal Review for Entomology and Plant Pathology

STAT 7000 Experimental Statistics

AGRN 6010/6016 Analysis of Plant, Soil, and Animal Data

BYMB Plant Physiology

AGRN 6100 Genetics

CHEM 6180 Biochemistry