Major Name: Degree: Effective Catalog Year: Change Major Name to: HORT Change Degree to: Bachelor of Science Change Curriculum Requirements Change General Education Requirements Add, Change, or Delete Concentration(s) Add, Change, or Delete Emphasis Area(s)	Horticulture Bachelor of Science 2018-2019 Curriculum Map: Proposed March 2017-20170306160319.doc Description: HORT Curriculum Map 2018-19 Additional Information: Description:
Summary/Explanation Add PES 4550 Seminar (1 cr.) as a required cours Rationale for Change Major Strengthen Program Requirement(s) Alignment of Student Learning Outcomes Alternative Delivery of Content Improve Time to Degree Evolution of the Discipline Changing Prerequisites Address DWF Rates General Education Modifications	Form User ID: jfaust Name: James Faust Date: 03/06/2017 Number: 30135

Paula agudelo H	March 29, 2017
Chair, Department Curriculum Committee	3/24/17
Department Chair	Date 4 2 0 1 7
Chair, College Curriculum Committee	4/20/17
College Dean	Date
Director, Calhoun Honors College	Date 5/5/2017 Date
Chair, Undergraduate Curriculum Committee	5
	Date
Chair, Graduate Curriculum Committee Resource State S	8/24/17 Date
Provost	
President	Date

orticulture		Freshma	n Year		
				Second Semester	
	First Semester	3	BIOL 1040	General Biology II	3
ORT 1010	Intro. to Hort.	3	BIOL 1060	General Biology Lab II	1
IOL 1030	Gen. Biology	1	ENGL 1030	Accelerated Composition	3
BIOL 1050	Gen. Bio. Lab I	4	CH 1020	Gen. Chem. II	4
CH 1010	Gen. Chem. I		MATH 1010 ²	Essential Math	3
Arts & Humanities (I	Non-Lit) Requirement ¹	3	Social Science Req		3
Elective		1			
Semester Hours: 1	5		Semester Hours: 1	1	
Schloder Trans	11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Sophom	ore Year	Second Semester	A CALLED
Part South France	First Semester	THE REAL PROPERTY.		The state of the s	3
HORT 2100/2101	Growing Garden Plants in the Fall	3	HORT 2110/2111	Growing Garden Plants in the Spring	4
HORT 3030/3031	Landscape Plants	3	PES 2020	Soils	3
MATH 1020 ²	Intro. to Math Analysis	3	Business Requiren		3
		4	Arts and Humanitie	es (Lit) Requirement ¹	2
Plant Biology Requirement ¹ Social Science Requirement ¹		3	Elective		. 2
			Semester Hours:	15	
Semester Hours:	16	Sur	nmer		1 2
	1	3	or HORT 4710	Advanced Internship4	3
HORT 2710	Internship ⁴	Juni	or Year		- F. J. A.S.
	First Semester	E SE	TO EAST	Second Semester	
	Sustainable Landscape Garden. Design	3	BIOL 4010	Plant Physiology	3
HORT 3080		3	BIOL 4020	Plant Physiology Lab	1
HORT Specializa	tion Requirement ³	3	HORT 4040	Plant Propagation	3
Related Science		3	HORT 4050	Plant Propagation Tech. Lab	1 3
	tions Requirement ¹	3	HORT Specializa	HORT Specialization Requirement ³	
Business Require	irement ¹		Related Science		3
_			Elective PE	S 4550 Seminar	1
			Semester Hours	: 15	
Semester Hours	: 15	Con	ior Year	*	
		Sei	I Assault S	Second Semester	
	First Semester		HORT Specializ	ration Requirement ³	
HORT 4090	Capstone	3	Related Science	e Requirement ³	
PES 4550	Seminar	1	Business Requi		
HORT Specializ	zation Requirement ³	3	Elective		
Related Science Requirement ³		3	Elective		
Related Scienc	9 1 1 1	2			

Total - 120 hrs

- ¹ See General Education Requirements. The Cross-Cultural Awareness and Science and Technology in Society General Education requirements must also be satisfied through these courses.
- ² STAT 2220 & 2300 or STAT 2300 & 3300 can be substituted for the MATH requirements.
- ³ See advisor. Select from approved departmental list. 4 Internship must be completed in one or two semesters. Internship may be done fall or spring or summer after completing HORT 303. Prior approval is required for internships and a 2.0 is required for registration.
- * Horticulture majors must make a C or better in all HORT courses.

000203

Change Major	on Ed Chacklist fo	rm must accompany this form.		
Change Major If Gen Ed requirements are changed a separate <u>G</u>	en eu checkise 10	cation		
Major Name:	Agricultural Educ			
Degree:	Bachelor of Scie	nce		
Effective Catalog Year:	2017-2018	15 Junetics 2016-2017 -		
☐ Change Major Name to: AGED	Curriculum	Agricultural Education 2016-2017 - Teaching Current-20170418134200.doc		
☐ Change Degree to: Bachelor of Science	Map:	Current Curriculum Map		
✓ Change Curriculum Requirements	Description:			
☐ Change General Education Requirements	Additional	Agricultural Education 2017-2018 - Teaching New-20170418134200.doc		
☐ Add, Change, or Delete Concentration(s)	Information:	_		
☐ Add, Change, or Delete Emphasis Area(s)	Description:	New Curriculum Map		
Summary/Explanation In order to offer AGED 2030, Teaching Agriscience Biosystems Technology I because the content is reached as a specific of the content is replaced by the content of the content is replaced of educational technologies and specific of multiculturalism into other courses in the Ag Ed	y AGED 2000 (Ag A	pplications of Educational Technology) due to		
Rationale for Change Major —————	Form——			
✓ Strengthen Program Requirement(s)	User ID: apb	yrd Name: Alex Byrd		
Outcomes	Date: 04/	18/2017 Number: 30220		
Delivery of Content				
The barron				
Library of the Discipline				
- at - Draroquisites				
☐ Address DWF Rates				
General Education Modifications				
(Places specify)				
Other (Please specify.)				

Agricultural Education 2016-2017 — Teaching Emphasis Area

Freshman Year

First Semester				
Agric. Ed. Freshman Seminar	1			
	3			
Introduction to Animal Science	3			
Introduction to Animal Science Lab	1			
	3			
6768.	1			
	3			
	3			
	Agric. Ed. Freshman Seminar Multiculturalism in Agric. Ed.			

Second Semester		
AGED 1000	Orientation and Field Experience	l ·
AGM 2050	Principles of Fabrication	3
BIOL 1040	General Biology II	3
BIOL 1060	General Biology Lab. II	1
ENGL 1030	Accelerated Composition	3
	Requirement ²	6
Semester Hou	rs: 17	

Semester Hours: 18

Sophomore Year

First Semester		
AGED 2010	Intro. To Agricultural Education	3
AGED 2040	Applied Agriculture Calculations	3
BT 2200	Biosystems Technology I	3
CH 1010	General Chemistry	4
	Introduction to Turfgrass Culture	3
HORT 2120		1
HORT 2130	Turfgrass Culture Lab.	1
Semester Hours: 17		

	Second Semester	
CH 1020	General Chemistry	4
EDSP 3700	Introduction to Special Education	3
PHYS 2070	General Physics I	3
STAT 2300	Statistical Methods I	3
Arte and Hum	anities (Non-Lit.) and Science and Society Requirement ³	3
Toomieregy =		

Junior Year

		Junior	· Year		
			Second Semester		
A CED 2020	First Semester Mechanical Technology for	3	AGED 4160	Ethics and Issues in Agriculture and the Food and Fiber System	3
AGED 3030	Agriculture Education	3	EDF 3020	Educational Psychology	3
AGM 2210	Surveying	3	ENR 3020	Natural Resources Measurements	3
HORT3030	Landscape Plants		HORT 4040	Plant Propagation	3
PES 2020	Soils	4	HORT 4050	Plant Propagation Techniques Lab.	1
Advanced Writing Requirement ¹		3		ication Requirement ²	3
Semester Hou	ra: 16		Semester Hour		
Semester nou	15. 10	α.	Waam		

Senior Year

	First Semester	
AGED 4000	Supervised Field Experience II	1
AGED 4010	Instructional Methods in Ag. Ed.	3
AGED 4030	Principles of Adult/Ext. Education	3
	Curriculum	3
AGED 4230	anities (Literature) Requirement ³	3
	Secondary Content Area Reading	3
EDLT 4980		
Semester Hou	rs: 16	

211	Second Semester	
AGED 4060	Directed Teaching	12
AGED 4250	Teaching Agricultural Mechanics	2
AODD 1250		
Semester Hou	rs: 14	

Total – 130-131 Total Semester Hours

² See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement. Note: ANTH 2010, ¹ MATH 1010, 1020, 1060, 1080, or 2070 GEOG 1030 or HIST 1730 is recommended to satisfy the Social Science Requirement.

³ Required of students in Communication Emphasis Area only.

⁴See advisor.

¹ ENGL 3040 or 3140 is recommended.

 $^{^{\}rm 2}$ See General Education Requirements. COMM 1500 or 2500 is recommended.

³ See General Education Requirements.

Agricultural Education 2018-2019 – Teaching Emphasis Area

Freshman Year

First Semester			
AGED 1020	Agric. Ed. Freshman Seminar	1	
AGED 2000	Ag Applications of Ed Technology	3	
AVS 1500	Introduction to Animal Science	3	
AVS 1510	Introduction to Animal Science Lab	1	
BIOL 1030	General Biology I	3	
BIOL 1050	General Biology Lab. I	1	
HORT 1010	Horticulture	3	
Mathematics Requirement ¹		3	
	5.0		

	Second Semester	
AGED 1000	Orientation and Field Experience	1
AGM 2050	Principles of Fabrication	3
BIOL 1040	General Biology II	3
BIOL 1060	General Biology Lab. II	1
ENGL 1030	Accelerated Composition	3
Social Science	Requirement ²	6
Semester Hou	rs: 17	

Semester Hours: 18

Sophomore Year

		A
First Semester		
AGED 2010	Intro. To Agricultural Education	3
AGED 2040	Applied Agriculture Calculations	3
PHYS 2070	General Physics I	3
CH 1010	General Chemistry	4
HORT 2120	Introduction to Turfgrass Culture	3
HORT 2130	Turfgrass Culture Lab.	1
Semester Hou	rs: 17	

	Second Semester	
CH 1020	General Chemistry	4
EDSP 3700	Introduction to Special Education	3
AGED 2030	Teaching Agriscience	3
STAT 2300	Statistical Methods I	3
Arts and Huma Technology in	nnities (Non-Lit.) and Science and Society Requirement ³	3
Semester Hou	rs: 16-17	

Junior Year

		Junior	1 Cai		
	First Semester			Second Semester	
AGED 3030	Mechanical Technology for Agriculture Education	3	AGED 4160	Ethics and Issues in Agriculture and the Food and Fiber System	3
AGM 2210	Surveying	3	EDF 3020	Educational Psychology	3
HORT3030	Landscape Plants	3	ENR 3020	Natural Resources Measurements	3
PES 2020	Soils	4	HORT 4040	Plant Propagation	3
	ting Requirement ¹	3	HORT 4050	Plant Propagation Techniques Lab.	1
Advanced WII	ting Requirement		Oral Communi	ication Requirement ²	3
Semester Hour	rs: 16		Semester Hour		

Senior Year

	First Semester	
AGED 4000	Supervised Field Experience II	1
AGED 4010	Instructional Methods in Ag. Ed.	3
AGED 4030	Principles of Adult/Ext. Education	3
AGED 4230	Curriculum	3
Arts and Humanities (Literature) Requirement ³		3
EDLT 4980 Secondary Content Area Reading		3
Semester Hou	rs: 16	

Second Semester		
AGED 4060	Directed Teaching	12
AGED 4250	Teaching Agricultural Mechanics	2
Semester Hou	rs: 14	

Total - 130-131 Total Semester Hours

¹ MATH 1010, 1020, 1060, 1080, or 2070

² See General Education Requirements. Three of these credit hours must also satisfy the Cross-Cultural Awareness Requirement. Note: ANTH 2010, GEOG 1030 or HIST 1730 is recommended to satisfy the Social Science Requirement.

³ Required of students in Communication Emphasis Area only.

⁴See advisor.

¹ ENGL 3040 or 3140 is recommended.

 $^{^{2}}$ See General Education Requirements. COMM 1500 or 2500 is recommended.

³ See General Education Requirements.

000196

Delete Undergraduate Course

Delete a Course Subject: PES-Plant and Env Sci Number: 4010 Effective Term: Fall 2018 Title: Academic and Professional Dev □ Delete Honors Course: Last Term Course was taught: 201601 Brief Statement of Change Based on Assessment Results: Assessment reveals students no longer require this course. The resources now available on campus meet the need. Assessment reveals students no longer sequire this course. The resources now available on campus meet the need. □ Strengthen Program Requirement(s) □ Alignment of Student Learning Outcomes □ Improve Time to Degree □ Evolution of the Discipline □ Changing Prerequisites □ Address DWF Rates □ General Education Modifications □ Other (Please specify.)	delete Undergraduate v		Rationale for Delete Course
	Sunject: Number: Effective Term: Title: Delete Honors Course: Last Term Course was taught:	4010 Fall 2018 Academic and Professional Dev 201601	 □ Strengthen Program Requirement(s) □ Alignment of Student Learning Outcomes □ Alternative Delivery of Content □ Improve Time to Degree □ Evolution of the Discipline □ Changing Prerequisites □ Address DWF Rates □ General Education Modifications

User ID: pagudel Name:

Paula Agudelo

Date:

03/06/2017 Number: 30148

ergraduate Course - Curriculum & Course	000197
	March 29, 2017
Paula agudelo Mi	Date
Chair, Department Couriculum Committee	3/29/17
Thry Value	Date
Department chair	4/20/17
Kin Dolut of in	Date
Chair. College Curriculum Committee O 1 1	4/20/17
Chair. College Curriculum Committee A. Berthau College Dean	Date
College Dean	
	Date
Director, Calhoun Honors College	2/2/0011
On D. Miffe	Date
Chair, Undergraduate Curriculum Committee	
	Date
Chair, Graduate Curriculum Committee	2/24/17
Robert Wyones	
Provost	
	Date
President	

- Change Major If Gen Ed requirements are changed a separate <u>G</u>	ion Ed Checklist form must accompany this form.
	Plant and Env Sciences
Major Name: Degree:	Bachelor of Science
Effective Catalog Year: Change Major Name to: PES Change Degree to: Bachelor of Science Change Curriculum Requirements Change General Education Requirements Add, Change, or Delete Concentration(s) Add, Change, or Delete Emphasis Area(s)	2018-2019 Curriculum Map: Major - PES- 20170331130525.pdf Description: PES curriculum map Additional Information: Description:
Summary/Explanation	t are as a requirement for the major
(all three concentrations). Assessment reveals set they are obtaining the content in other places. The need. For the Agronomy Concentration, replaces	with 1 concentration requirement.
(all three concentrations). Assessment reveals see	oe resources now available on campus meet the

	March 29, 2017.
Paulalgudels Ru Chair, Department Currellum Comprince	3/24/17 Date
Department ghair	4/20/17 Date
Chair. College Curriculum Committee O M. Derthand	4/24/17 Date
College Dogs	Date
Director, Calhoun Honors College (2) 20. Wiffi	.5/5/7017 Date
Chair, Undergraduate Curriculum Committee	
Chair, Graduate Curriculum Committee	8/24/17
Robert Myres	Date
	Date
President	



Plant and Environmental Sciences – Agronomy Concentration 2018-19

Freshman Year

		Fresnm
	First Semester	
BIOL 1030	General Biology ¹	3
BIOL 1050	General Biology Lab. I ¹	1
CH 1010	General Chemistry	4
	Intro. To Math. Analysis OR	3
MATH 1020	Business Calculus I	4
MATH 1060		3
PES 1040	Introduction to Plant Science	
C-master Ho	urc: 11-15	

Year		A Poble
	Second Semester	
BIOL 1040	General Biology II ¹	3
BIOL 1060	General Biology Lab II ¹	1
	General Chemistry	4
CH 1020	Accelerated Composition	3
ENGL 1030	Statistical Methods I	3
STAT 2300	793	3
Arts and Huma	anities (Non-Lit.) Requirement ²	3
Semester Hou	rs: 17	

 $^{^1}$ BIOL 1100 may substitute for BIOL 1030/1050 and BIOL 1110 may substitute for BIOL 1040/1060; BIOL 1100 and 1110 are recommended for students in the Agricultural Biotechnology Concentration.

Sophomore Year

	John
First Semester	
Survey of Organic Chemistry	3
	1
Insect Biology and Diversity	4
Soils	4
Principles of Plant Pathology	3
rs: 15	
	Survey of Organic Chemistry Survey of Organic Chemistry Lab. Insect Biology and Diversity Soils

	NAME OF THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER,
Second Semester	
Agriculture and Society	3
	3
Public Speaking	3
Fundamental Genetics	3
General Microbiology	4
rs: 13	
	Agriculture and Society Intro. To Human Comm. OR Public Speaking Fundamental Genetics

Summer

	Summer	
ENT 4070	Applied Agricultural Entomology	3
PLPA 4110	Plant Disease Diagnosis	3
1 21 7		

Semester Hours: 6

Junior Year

First Semester	
Agricultural Economics OR	3
	3
	3
MASS II MINERAL COLUMN TO THE	3
	3
	3
Concentration Requirement	-
	First Semester Agricultural Economics OR Principles of Microeconomics Essential Elements of Bioch. Principles of Integrated Pest Mgt. Major World Crops Concentration Requirement ¹

ear		
	Second Semester	
BIOL 4010	Plant Physiology	3
	Plant Physiology Lab.	1
BIOL 4020	Scientific Writing and Comm.	3
ENGL 3150	Acad.Prof Dev. Concentration Req.	1
PES 4010		3
PES 4050	Plant Breeding	
PES 4090	Biology of Invasive Plants	3
PES 4550	Seminar	1
Semester Hou	rs: 15	

Semester Hours: 15

Senior Year

	First Semester	
PES 4450	Regulatory Issues and Policies	3
	Beneficial Soil Organisms in Plant	3
PES 4900	Growth	
Arts and Humanities (Literature) Requirement ²		3
Concentration Requirement ¹		3
		3
Social Science Requirement ² Semester Hours: 15		

	Second Semester	
PES 3500	Practicum	3
PES 4520	Soil Fertility and Management	3
PES 4530	Soil Fertility Lab.	1
Concentration Requirement ¹		6
Semester Ho	ours: 13	

Total 123 -124 Total Semester Hours

- ¹ Select from a department-approved list.
- ² See General Education Requirements.

²See General Education Requirements. PHIL 1030 is recommended for students in the Agricultural Biotechnology Concentration.

Rhonda Todd

From:

Paula Agudelo

Sent:

Monday, May 08, 2017 8:58 AM

To:

Rhonda Todd Shannon Clark

Cc: Subject: revised PES item

Attachments:

PES item revised.pdf

I am attaching the revised PES item for the Agronomy concentration. We eliminated one course (PES 4010), but this concentration was short one credit without it. We fixed, as suggested, by replacing with an elective (conc. req.). The other two, stay as originally proposed.

I hope you find everything in order.

Thank you,

Paula

Paula Agudelo, Ph.D.

Associate Professor - Nematologist Plant Nematology Lab, 219A BRC Clemson University Clemson, SC 29634 (864)656-5741

From: Rhonda Todd

To: Andrew Levin; Becky Pearson; BLAKE SNIDER; Bruce Whisler; Burak Eksioglu; Calvin Becker; Cameron Bushnell; C Cooper; Carol Pelletier; Cecelia Hamby; Chad Sosolik; Christopher Kitchens; Christopher Vinson; Dale Layfield; Dana Simpson; Daniel Wueste; David Knox; Debbie Wright; Debra Sparacino; Donna Barrett; Hugh Spitler; Jack Wolf; Jason Lucas; Jeffrey Appling; Jessica Martin; John D. Griffin; John M. Coggeshall; Joseph Wilson - Clemson University (jrw6@clemson.edu); LeDon Wilson; Lee A. Crandall; Linda Tindal; Matthew Klein; Michael Sehorn; Melinda Spearman; Necole S Richardson; Pamela Dunston; Pamela Mack; Paula Agudelo; Penelope W Brunner; Reagan Blondeau; Rhonda Todd; Robert Kosinski; Robert Silance; Robert Wilmott; Roger Gomes; Shannon Clark; Shreya Shankar (shanka2@clemson.edu); Tracy L Dodson; William Lasser

Subject: MEETING REMINDER - APRIL MEETING MINUTES

Good morning,

Undergraduate Curriculum Committee will meet today at 1:30 PM in E304 Martin Hall. I have attached the April meeting minutes for your review. I apologize for the late send out.

Best Regards,

Rhonda

Rhonda Todd

Administrative Coordinator

Plant and Environmental Sciences Agricultural Biotechnology Concentration 2018-19

Freshman Year

		Fresninai
	First Semester	
BIOL 1030	General Biology ¹	3
BIOL 1050	General Biology Lab. I ¹	1
	General Chemistry	4
CH 1010	Business Calculus I OR	3
MATH 1020		4
MATH 1060	Calculus of One Variable I	3
PES 1040	Introduction to Plant Science	
S setor Ho	urc: 14-15	

	Second Semester	
PIOL 1010	General Biology II ¹	3
BIOL 1040	General Biology Lab II ¹	1
BIOL 1060	General Chemistry	4
CH 1020	Accelerated Composition	3
ENGL 1030	Statistical Methods I	3
STAT 2300		3
Arts and Hum	nanities (Non-Lit.) Requirement ²	
Semester Ho	urs: 17	

¹BIOL 1100 may substitute for BIOL 1030/1050 and BIOL 1110 may substitute for BIOL 1040/1060; BIOL 1100 and 1110 are recommended for students in the Agricultural Biotechnology Concentration.

Sophomore Year

		000
	First Semester	
BIOL 3040	Biology of Plants	3
	Survey of Organic Chemistry	3
CH 2010	Survey of Organic Chemistry Lab.	1
CH 2020	Insect Biology and Diversity	4
ENT 3010	Principles of Plant Pathology	3
PLPA 3100	Principles of Fidite Case 57	

year		
00000000000000000000000000000000000000	Second Semester	THE RES
AGRB 2050	Agriculture and Society	3
BIOL 3350	Evolutionary Biology	3
	Intro. To Human Comm. OR	3
COMM 1500	Public Speaking	3
COMM 2500	Fundamental Genetics	3
GEN 3000		4
MICR 3050	General Microbiology	1
PES 4550	Seminar	
Semester Hou	rs: 17	

Semester Hours: 14

Junior Year

	NAME OF THE PROPERTY OF THE PR	Juin
	First Semester	
BCHM 3050	Essential Elements of Biochem.	3
	Economic Concepts or	3
ECON 2000	Principles of Microeconomics	3
ECON 2110	Agricultural Biotechnology	3
PES 3350		3
PES 4220	Major World Crops	3
	Social Science Requirement ¹	
Semester Hou	rs: 15	

T	A CO. LANGE TAL	Second Semester	
Statement			3
1	BIOL 4010	Plant Physiology	1
١	BIOL 4020	Plant Physiology Lab.	1-
Ì	ENGL 3150	Scientific Writing and Comm.	3
	PES 4010	Academic and Professional Dev.	1
		Plant Breeding	3
	PES 4050	Biology of Invasive Plants	3
	PES 4090		
	Semester Ho	urs: 14 13	

Summer

Julinie	2
Medical Botany	3
	Medical Botany

Semester Hours: 3

Senior Year

		50
	First Semester	
DEC 4450	Regulatory Issues and Policies	3
	Beneficial Soil Organisms in Plant	3
	Growth	3
Arts and Hur	nanities (Literature) Requirement ^a	
Concentration Requirement ²		6
Semester Ho	PES 4900 Growth Arts and Humanities (Literature) Requirement ¹	

	Second Semester	
PES 3500	Practicum	3
12001	Concentration Requirement ²	9
Semester Ho	ours: 12	

Total 121-122 120-121 Total Semester Hours

²See General Education Requirements, PHIL 1030 is recommended for students in the Agricultural Biotechnology Concentration.

 $^{^{}m 1}$ See General Education Requirements. ²Select from a department approved list. Courses to support proficiency in a foreign language also are encouraged.

Plant and Environmental Sciences – Soil and Water Science Concentration 2017-18

Freshman Year

		riesiii
	First Semester	
BIOL 1030	General Biology ¹	3
BIOL 1050	General Biology Lab. I ¹	1
CH 1010	General Chemistry	4
MATH 1020	Intro. To Math. Analysis OR	3
MATH 1060	Calculus of One Variable I	4
PES 1040	Introduction to Plant Science	3
Somester Hou	West Section 1	

Second Semester		
General Biology II ¹	3	
General Biology Lab II ¹	1	
General Chemistry	4	
Accelerated Composition	3	
Statistical Methods I	3	
STAT 2300 Statistical Methods I Arts and Humanities (Non-Lit.) Requirement ²		
	General Biology II ¹ General Biology Lab II ¹ General Chemistry Accelerated Composition Statistical Methods I	

¹BIOL 1100 may substitute for BIOL 1030/1050 and BIOL 1110 may substitute for BIOL 1040/1060; ²See General Education Requirements.

Sophomore Year

First Semester		
CH 2010	Survey of Organic Chemistry	3
CH 2020	Survey of Organic Chemistry Lab.	1
GEOL 1010	Physical Geology	3
GEOL 1030	Physical Geology Lab.	1
PES 2020	Soils	4
PHYS 2070	General Physics I	3
PHYS 2090	General Physics I Lab.	1

Second Semester		
APEC 2050	Agriculture and Society	3
COMM 1500	Intro. To Human Comm. OR	3
COMM 2500	Public Speaking	3
MICR 3050	General Microbiology	4
PHYS 2080	General Physics II	3
PHYS 2100	General Physics II Lab.	1

Junior Year

	First Semester	
AGM 3010	Soil and Water Conservation	3
PES 4220	Major World Crops	3
AND CARDON PROCESSION	n Requirement ¹	9
Semester Ho	urs: 15	

Second Semester		
BIOL 4010	Plant Physiology and	3
BIOL 4020	Plant Physiology Lab.	1
ENGL 3150	Scientific Writing and Comm.	3
	Requirement ¹	3
PES 3150	Environment and Agric.	3
DES 4010	Academic and Professional Dev.	1
Social Science	Requirment ²	3
Semester Hou		

Senior Year

First Semester	
Practicum	3
Soil Genesis and Classification	2
Seminar	1
ial Technology Requirement ³	3
Arts and Humanities (Literature) Requirement ²	
Field Scale Environmental Mgt. Requirement ⁴	
ours: 15	
	Practicum Soil Genesis and Classification Seminar ial Technology Requirement ³ nanities (Literature) Requirement ²

ear				
	Second Semester			
PES (BE) 4080	Land Treatment of Wastewater and Sludges	3		
PES 4900	Beneficial Soil Organisms in Plant Growth	3		
Concentration Requirement ¹		6		
Social Science F	·	3		
	-			
Semester Hour	rs: 15			

Total 123-124 122-123 Total Semester Hours

¹ Select from a department-approved list.

² See General Education Requirements.

 $^{^{\}rm 3}\text{AGM}$ 4100, FOR 4330, GEOL 4210, or other course approved by advisor.

⁴AGM 4020, GEOL 4090, or other course approved by advisor.



Paula Agudelo H.

MEMO

TO: Undergraduate University Curriculum Committee

FROM: Paula Agudelo, Dept. Curriculum Committee Chair

Department of Plant and Environmental Sciences

Department of Plant and Environmental Sciences

CC: Gregory Reighard, Interim Chair

Department of Plant of Environmental Sciences

Jean Bertrand, Associate Dean for Undergraduate Studies College of Agriculture, Forestry and Life Sciences

College of AGRICULTURE, FORESTRY & LIFE SCIENCES

DATE: 21 April, 2017

210 Biosystems Research Complex 864-656-5741 pagudel@clemson.edu SUBJECT: Notification of changes to courses listed in footnotes

The Department of Plant and Environmental Sciences requests the following changes to the courses used to fulfill major requirements (listed in footnotes in the Catalog).

B.S. in Horticulture:

footnote 5, Horticulture Specialization Requirement:

Remove:

FOR 4800 Selected Topics in Urban Forestry

footnote 6, Related Science Requirement:

Remove:

WFB 4620 Wetland Wildlife Biology

Add:

AGM 4100 Precision Agriculture Technology

CH 2010 Survey of Organic Chemistry

FOR 2060 Forestry Ecology

FOR 4340 Geographic Information Systems for Natural Resources

PES 3150 Environment and Agriculture PES 3350 Agricultural Biotechnology

PES 3400 Medical Botany

PES 4030 Soil Genesis and Classification

PES 4220 Major World Crops PES 4460 Soil Management

PES 4760 Sustainable Food Systems

PES 4900 Beneficial Soil Organisms in Plant Growth

B.S. in Plant and Environmental Sciences:

Concentration Requirement footnotes for all 3 concentrations:

Add: PES 4960/PES 4970 Selected Topics in Creative Inquiry/Lab

Soil and Water Science, Footnote 4, Field Scale Environmental Management Requirement

Add:

GEOL 3000 Environmental Geology

EES 4140 Radioecology PES 4460 Soil Management

B.S. in Turfgrass:

Footnote 4, Horticulture Specialization Requirement:

Add: HORT 4040 Plant Propagation

Footnote 5, Soil Science Requirement:

Correct entire footnote to simply read: "Select PES 4850 or 4900"
PES 4850 Environmental Soil Chemistry or
PES 4900 Beneficial Soil Organisms in Plant Growth