

From: [Osborne, Jeanne](#)
To: [Smith, Randy](#)
Cc: [Reed, Katie](#); [Violet, Cynthia](#); [Lewandowski, Monica](#); [Barker, David](#); [Klooster, Wendy](#); [Lindsey, Alexander](#)
Subject: Information item for CAA: Corrected Update to the Sustainable Plant Systems - AEC BS AGR
Date: Friday, June 13, 2025 9:19:15 AM
Attachments: [SPS Agroecology \(eff AU22\) - Final CORRECTED.docx](#)
[image001.png](#)
[SPS Agroecology \(eff AU23\) 9.15.23 Highlight CORRECTED.docx](#)

Dear Dr. Smith,

Attached please find updated curriculum sheets for the Sustainable Plant Systems – Agroecology Specialization BS AGR Effective AU22 and AU23, offered in the College of Food, Agricultural, and Environmental Sciences. There has been an additional update to the AU22 version that was sent to you on 4 June. In the process of reviewing majors to be programmed into the new degree audit system, Buckeye Degree Planner, we are carefully reviewing all our curriculum sheets. For the SPS-AEC major, Effective AU22 and AU23, we identified a correction that is the result of a course implementation that is different than what was listed in the original curriculum sheets. Specifically:

- AU22 and AU23: HCS/AGSYSMT 3586 Digital Agriculture with Laboratory (4 cr) has been approved and is an alternative to HCS/AGSYSMT 3585 Digital Agriculture (3 cr) – this is listed in both the Major Electives group and the Minor Equivalent Group C2.
- AU22: AGSYSMT 3580 has been replaced by AGSYSMT 5560 – this is listed in the Minor Equivalent Group C1

No current students will be impacted by this update.

Attached please find the updated curriculum sheets highlighting the changes. I believe this can be shared as an information item with the Council on Academic Affairs – if you believe this will require a vote for approval (rather than shared as an information item), please let me know and I will prepare a formal proposal for revision.

Please let me know if you need additional information or clarification.

Thank you,

Jeanne



THE OHIO STATE UNIVERSITY

Jeanne M. Osborne | Pronouns: She, Her, Hers

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'Unexpected kindness is the most powerful, least costly, and most underrated agent of human change' (Bob Kerrey)

Bachelor of Science in Agriculture
Major: Sustainable Plant Systems
Specialization: Agroecology

This specialization focuses on understanding and applying ecological principles in crop production to integrate natural biological cycles and controls, make efficient use of resources, enhance environmental quality, and increase biodiversity. Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	Course Options	Hours
GE Launch Seminar	GENED 1201	1
Writing and Information Literacy	Major requirement: ENGLISH 1110 * (or <i>Student Choice – see below</i>)	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: MATH 1130, 1148, 1150, 1151, or 1156 * (or <i>Student Choice – see below</i>)	4-5
Literary, Visual and Performing Arts	Student Choice	3
Historical & Cultural Studies	Student Choice	3
Natural Science	Major requirement: BIOLOGY 1113 * (or <i>Student Choice – see below</i>)	4
Social & Behavioral Sciences	Major requirement: AEDECON 2001 or ECON 2001.01 * (or <i>Student Choice – see below</i>)	3
Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World^a	Student Choice	4-6
Theme: Student Choice^a	Student Choice	4-6
GE Reflection	GENED 4001	1
Credit Hours:		33-38

* Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student makes an alternative selection in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	Course Options	Hours
College & Department Survey	FAES 1100 (0.5) & HCS 1100 (0.5)	1
Oral Expression	AGRCOMM 3130 or COMM 2110	3
Additional Science	CHEM 1110, 1210, or 1220	5
Internship	FAES 3191 & HCS 4191.01	2
Minor Equiv. ^b	See pg. 2	15-18
Credit Hours:		26-29

General Education	33-38
Degree Requirements	26-29
Major Supporting Courses (pg. 2)	12
Major	41-42
Open Electives	0-9
Minimum Total Credit Hours	121

^a Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ♦ symbol.

^b Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

^c Only up to 6 credits of any combination of 4193, 4998, 4999, or 4999H can count towards major electives.

^d Review prerequisites.

Major Coursework		
Course	Title	Hours
HCS 2202	Form and Function in Cultivated Plants	4
HCS 2201 -or- HCS 2204 & HCS 2205	Ecology of Managed Plant Systems (prior to AU22) Ecology of Managed Plant Systems ♦ (3) Ecology of Managed Plant Systems Lab (1)	4
HCS 2260	Data Analysis and Interpretation for Decision Making	3
HCS 3100 -or- HCS 3200	Intro to Agronomy Intro to Horticulture	3
HCS 3220	Crop Origins and Diversity	2
HCS 3310	Crop Responses to the Environment	3
HCS 3320 -or- HCS 3420	Plant Propagation Seed Science	3
HCS 5422	Biology & Mgmt of Weeds and Invasive Plants	3
ENR 3000	Soil Science	3
ENR 3001	Soil Science Laboratory	1
<i>Select one production course:</i>		3
HCS 5411	Grain, Oilseed, and Fiber Crops	
HCS 5412	Agroecology of Grasslands and Prairies	
HCS 5450	Veg Crop Production & Physiology	
HCS 5460	Fruit Crop Physiology & Production	
<i>Select one capstone course:</i>		3
HCS 5100	Advanced Cropping Systems	
HCS 5200	Advanced Horticultural Principles and Practices	
HCS 5602	The Ecology of Agriculture	
Major Electives: Select 6-7 credit hours from:		
HCS 2307	Sustainable Agriculture Practical Experience	2
HCS 3380	Latino Workforce in Land Based Industry	2
HCS 3488.01	Professional Development in HCS	1-3
HCS 3521	Greenhouse Systems and Management	2
HCS 3522	Sustainable Irrigation	3
HCS/AGSYSMT 3585 or 3586	Digital Agriculture /with Laboratory♦	3-4
HCS 4193	Individual Studies	1-3
HCS 4300	Hydroponic Crop Production	2
HCS 4301	Hydroponic Crop Production Lab	1
HCS 4520	Medicinal Plants	2
HCS 4998	Undergraduate Research	1-6
HCS 4999	Research with Distinction	1-6
HCS 4999H	Honors Research with Distinction	1-6
HCS 5097.01-.04 & 5797.01-.04	Study Abroad Pre-Departure & Study Abroad	4
HCS 5306	Sustainable Vegetable Production Practicum	3
HCS 5325	Plant Genetics	3
HCS 5420	Environmental Impacts of Crop-Livestock Systems	3
HCS 5621	Physiology of Cultivated Plants	3
HCS 5622^d	Biochemical Processes in Cultivated Plants	3
HCS 5625^d	Applied Plant Biotechnology	2
HCS 5825^d	Plant Breeding	2
HCS 5887	Introduction to Experimental Design	3
Credit Hours:		41-42

Major Supporting Coursework		
Course	Title	Hours
BIOLOGY 1114	Biological Sciences: Form, Function, Diversity, and Ecology	4
EEOB 3310.01 or .02	Evolution	4
EEOB 3410	Ecology	4
Credit Hours:		12

Minor Equivalent (15-18 hours): Select a minimum of 5-9 credit hours from both Group A and Group B; remainder of credits from Group C1 and/or C2		
Group A: Soil Ecology and Management		
ENR 3700	Introduction to Spatial Information for ENR	3
ENR 4260	Soil Resource Management	3
ENR 4285	Watershed Hydrology	3
ENR 5260	Soil Landscapes: Morphology, Genesis & Classification	3
ENR 5263	Biology of Soil Ecosystems	3
ENR 5268	Soils and Climate Change	3
ENR 5270	Soil Fertility	3
ENR 5279	Urban Soils and Ecosystem Services	3
Group B: Biotic Interactions in Agroecosystems		
ANIMSCI 3400	Management Intensive Grazing	2
ENTMLGY 2200	Beekeeping	3
ENTMLGY 4600	Introduction to Insect Science	1
ENTMLGY 4601	General Insect Pest Management	2
ENTMLGY 5420	Insect Behavior	3
ENTMLGY 5500	Biological Control	3
ENTMLGY 5600	Integrated Pest Management	3
PLNTPTH 3001	General Plant Pathology	3
PLNTPTH 3002	General Plant Pathology Lab	2
PLNTPTH 5110	Ecology and Management of Pathogens and Insects Affecting Trees in Forest & Urban Env.	3
PLNTPTH 5140	Diseases of Field Crops	2
PLNTPTH 5150	Fruit and Vegetable Diseases	3
PLNTPTH 5603	Plant Disease Management	3
Group C1: Population and Community Ecology		
AGSYSMT 3580/5560	UAS and Remote Sensing in Agriculture	3
EEOB 4410	Conservation Biology	3
EEOB 4430	Ecological Methods I	2
EEOB 5450	Population Ecology	3
EEOB 5470	Community and Ecosystems Ecology	3
ENR 4320 ^d	Sustainable Forest Products	3
ENR 5274	Ecosystem Simulation	3
Group C2: Human Ecology and Global Perspectives		
AEDECON 4532	Food Security and Globalization	3
ANIMSCI 3600	Global Food and Agriculture	3
EEOB 4240 -or- ANTHRO 5614	Ecology & Evolution of Plants and People - or-Ethnobotany	3
HCS/AGSYSMT 3585 or 3586	Digital Agriculture/ with Laboratory ✦	3-4
ENR 5600 ^d	Sustainable Agriculture and Food Systems	3
GEOG 3900	Global Climate Change	3
GEOG 5900	Weather, Climate, & Global Warming	3

- A minimum of **121** total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.
- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ✦ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may **not** be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
- A maximum of three credits of 3488 can be applied toward graduation although some majors may have a lower maximum. A cumulative point-hour ratio of 2.0 is required to register for 3488 credit.
- Credit hours for 4999 ("with Research Distinction") and 4999H ("with Honors Research Distinction") are repeatable to maximum of six hours.
- **An application for degree must be submitted online at least two semesters prior to the intended graduation term. Application found at: <https://students.cfaes.ohio-state.edu/academics/undergraduate/graduation>**

Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
 - A 2.00 cumulative point-hour ratio is required in the minor/minor equivalent with a minimum C- grade for any course to be listed in the minor or minor equivalent (includes transfer credit).
 - For programs requiring a minor: minors should be declared by the time students complete 60 hours.
 - A student is permitted to count up to 6 credit-hours of transfer and/or EM credit in the minor or minor equivalent.
- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.

Policies and General Requirements for Degree

Bachelor of Science in Agriculture
Major: Sustainable Plant Systems
Specialization: Agroecology

This specialization focuses on understanding and applying ecological principles in crop production to integrate natural biological cycles and controls, make efficient use of resources, enhance environmental quality, and increase biodiversity. Students in this major will complete a minimum of 121 hours outlined as follows.

General Education Requirements		
Requirement	Course Options	Hours
GE Launch Seminar	GENED 1201	1
Writing and Information Literacy	Student Choice	3
Mathematical & Quantitative Reasoning/Data Analysis	Major requirement: MATH 1130, 1148, 1150, 1151, or 1156 * (or <i>Student Choice – see below</i>)	4-5
Literary, Visual and Performing Arts	Student Choice	3
Historical & Cultural Studies	Student Choice	3
Natural Science	Major requirement: BIOLOGY 1113 * (or <i>Student Choice – see below</i>)	4
Social & Behavioral Sciences	Major requirement: AEDECON 2001 or ECON 2001.01 * (or <i>Student Choice – see below</i>)	3
Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World^a	Student Choice	4-6
Theme: Student Choice^a	Student Choice	4-6
GE Reflection	GENED 4001	1
Credit Hours:		33-38

* Indicates a pre/corequisite course for this major that also satisfies this GE category. If a student makes an alternative selection in this GE category, **they must also complete this course.**

B.S. in Agriculture Degree Requirements		
Requirement	Course Options	Hours
College & Department Survey	FAES 1100 (0.5) & HCS 1100 (0.5)	1
Oral Expression	AGRCOMM 3130 or COMM 2110	3
Additional Science	CHEM 1110, 1210, or 1220	5
Internship	FAES 3191 & HCS 4191.01	2
Minor Equiv. ^b	See pg. 2	15-18
Credit Hours:		26-29

General Education	33-38
Degree Requirements	26-29
Major Supporting Courses (pg. 2)	12
Major	41-42
Open Electives	0-9
Minimum Total Credit Hours	121

^a Students complete either a 4-credit course or two 3-credit courses in each of two General Education Theme areas: Citizenship for a Diverse & Just World (required), and the student's choice of available GE Themes. If any major-required courses are identified as a GE Theme course, one course in each GE Theme area may double count in the GE and major hours. Theme courses are identified with a ✦ symbol.

^b Students in this program complete a group of courses called a minor equivalent. Declaring an additional minor is not required.

^c Only up to 6 credits of any combination of 4193, 4998, 4999, or 4999H can count towards major electives.

^d Review prerequisites.

Major Coursework		
Course	Title	Hours
HCS 2202	Form and Function in Cultivated Plants	4
HCS 2204	Ecology of Managed Plant Systems ✦	3
HCS 2205	Ecology of Managed Plant Systems Lab	1
HCS 2260	Data Analysis and Interpretation for Decision Making	3
HCS 3100 -or-	Intro to Agronomy	3
HCS 3200	Intro to Horticulture	
HCS 3220	Crop Origins and Diversity	2
HCS 3310	Crop Responses to the Environment	3
HCS 3320 -or-	Plant Propagation	3
HCS 3420	Seed Science	
HCS 5422	Biology & Mgmt. of Weeds and Invasive Plants	3
ENR 3000	Soil Science	3
ENR 3001	Soil Science Laboratory	1
<i>Select one production course:</i>		3
HCS 5411	Grain, Oilseed, and Fiber Crops	
HCS 5412	Agroecology of Grasslands and Prairies	
HCS 5450	Veg Crop Production & Physiology	
HCS 5460	Fruit Crop Physiology & Production	
<i>Select one capstone course:</i>		3
HCS 5100	Advanced Cropping Systems	
HCS 5200	Advanced Horticultural Principles and Practices	
HCS 5602	The Ecology of Agriculture	
Major Electives: Select 6-7 credit hours from:		
HCS 2307	Sustainable Agriculture Practical Experience	2
HCS 3380	Latino Workforce in Land Based Industry	2
HCS 3488.01	Professional Development in HCS	1-3
HCS 3521	Greenhouse Systems and Management	2
HCS 3522	Sustainable Irrigation	3
HCS/AGSYSMT 3585 or 3586	Digital Agriculture/with Laboratory ✦	3-4
HCS 4193	Individual Studies	1-3
HCS 4300	Hydroponic Crop Production	2
HCS 4301	Hydroponic Crop Production Lab	1
HCS 4520	Medicinal Plants	2
HCS 4998	Undergraduate Research	1-6
HCS 4999	Research with Distinction	1-6
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HCS 5097.01-.04 & 5797.01-.04	Study Abroad Pre-Departure & Study Abroad	4
HCS 5306	Sustainable Vegetable Production Practicum	3
HCS 5325	Plant Genetics	3
HCS 5420	Environmental Impacts of Crop-Livestock Systems	3
HCS 5621	Physiology of Cultivated Plants	3
HCS 5622^d	Biochemical Processes in Cultivated Plants	3
HCS 5625^d	Applied Plant Biotechnology	2
HCS 5825^d	Plant Breeding	2
HCS 5887	Introduction to Experimental Design	3
Credit Hours:		41-42

Major Supporting Coursework

Course	Title	Hours
BIOLOGY 1114	Biological Sciences: Form, Function, Diversity, and Ecology	4
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ENR 5260	Soil Landscapes: Morphology, Genesis & Classification	3
ENR 5263	Biology of Soil Ecosystems	3
ENR 5268	Soils and Climate Change	3
ENR 5270	Soil Fertility	3
ENR 5279	Urban Soils and Ecosystem Services	3
Group B: Biotic Interactions in Agroecosystems		
ANIMSCI 3400	Management Intensive Grazing	2
ENTMLGY 2200	Beekkeeping	3
ENTMLGY 4600	Introduction to Insect Science	1
ENTMLGY 4601	General Insect Pest Management	2
ENTMLGY 5420	Insect Behavior	3
ENTMLGY 5500	Biological Control of Arthropod Pests	3
ENTMLGY 5600	Integrated Pest Management	3
PLNTPTH 3001	General Plant Pathology	3
PLNTPTH 3002	General Plant Pathology Lab	2
PLNTPTH 5110	Ecology and Mgt of Pathogens and Insects Affecting Trees in Forest & Urban Env.	3
PLNTPTH 5140	Diseases of Field Crops	2
PLNTPTH 5150	Diseases of Vegetable and Fruit Crops	2
PLNTPTH 5603	Plant Disease Management	3
Group C1: Population and Community Ecology		
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
EEOB 4410	Conservation Biology	3
EEOB 4430	Ecological Methods I	2
EEOB 5450	Population Ecology	3
EEOB 5470	Community and Ecosystem Ecology	3
ENR 4320 ^d	Sustainable Forest Products	3
ENR 5274	Ecosystems Simulation	3
Group C2: Human Ecology and Global Perspectives		
AEDECON 4532	Food Security and Globalization	3
ANIMSCI 3600	Global Food and Agriculture	3
EEOB 4240 -or- ANTHRO 5614	Ecology & Evolution of Plants and People -or- Ethnobotany	3
HCS/AGSYSMT 3585 or 3586	Digital Agriculture/with Laboratory ✧	3-4
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GEOG 3900	Global Climate Change	3
GEOG 5900	Weather, Climate, & Global Warming	3

Policies and General Requirements for Degree

- A minimum of 121 total credit hours. Remedial coursework (English 1109; EDUTL 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1010; Mathematics 1040, 1050, 1073, 1074, 1075) do not count toward the 121-hour minimum requirement for the BS degree.

- A minimum of 30 semester hours of credit earned through regular course enrollment at this University, and regular course enrollment in the last semester in the College of Food, Agricultural, and Environmental Sciences.
- A cumulative point-hour ratio of at least 2.00 on all coursework completed at The Ohio State University as well as at least a 2.00 in the major.
- If a major-required course or major elective is a GE Theme course, two 3-4 cr courses (no more than one per theme area) is permitted to double count in the GE and major hours. GE Theme courses are indicated with a ✧ symbol.
- Students are encouraged to participate in education abroad opportunities. Consult with your advisor for how education abroad credit applies to your degree or consider the CFAES Global Option.
- Students must complete a minimum of 40 hours in major/major supporting coursework with at least 12 hours taken from the academic unit(s) offering the major at OSU in the baccalaureate program.
- Courses required in the major (including major supporting courses and major electives) may not be taken pass/non-pass.
- Coursework taken as open electives may include a maximum of 4 credit hours of physical activity courses (all 1139-1197 courses), and a maximum of 4 credit hours of campus music organizations.
- A college maximum of six hours of individual studies courses (x193) can be applied toward graduation; some majors may have a lower maximum.
- Students of CFAES must complete an internship of 1-2 hours as a requirement for degree. Any additional internship credit hours may count towards major hours (consult with your advisor). A college maximum of six hours of internship credit can be applied toward graduation; some majors may have a lower maximum.
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Policies and General Requirements for Minors/Minor Equivalent

- The minor/minor equivalent must contain a minimum of 12 credit hours distinct from the major and/or additional minors (i.e., if a minor requires more than 12 credit hours, a student is permitted to overlap those hours beyond 12 with the major or with another minor).
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- Coursework graded Pass/Non-Pass cannot count in the minor. No more than 3 credit-hours of course work graded S/U may count toward the minor. Maximum of 3 credit-hours of xx93 are allowed to count in the minor.