From: Osborne, Jeanne
To: Smith, Randy

Cc: Reed, Katie; Violet, Cynthia; Lewandowski, Monica; Barker, David; Klooster, Wendy

Subject: Information item for CAA: Update to the Sustainable Plant Systems - CEA BS AGR

Date: Tuesday, April 1, 2025 1:42:25 PM

Attachments: <u>image001.png</u>

SPS Controlled Environment Agriculture (eff AU23) Highlight Corrected.docx SPS Controlled Environment Agriculture (eff AU23) CORRECTED.docx

Dear Dr. Smith

Attached please find an updated curriculum sheet for the Sustainable Plant Systems – Controlled Environment Agriculture Specialization BS AGR offered in the College of Food, Agricultural, and Environmental Sciences. 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-CEA major, we identified two updates that are a result of course changes that have been implemented since the CEA specialization was approved. Specifically:

- HORTTEC 3560T (listed in the major electives) has been placed into limbo, so it is no longer available and needs to be removed from the list of options.
- 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.

No current students will be impacted by this update.

Attached please find an updated curriculum sheet highlighting the changes, and a clean version of the curriculum sheet. 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



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

Assistant Dean for Academic Affairs College of Food, Agricultural, and Environmental Sciences 100E Agricultural Administration, 2120 Fyffe Rd. Columbus, OH 43210

Tel: 614-292-1734 Fax: 614-292-1218

e-mail: Osborne.2@osu.edu

'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: Controlled Environment Agriculture

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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 Student Choice – see below)	4-5
Literary, Visual and Performing Arts	Student Choice	3
Historical & Cultural Studies	Student Choice	3
Natural Science	Major requirement: BIOLOGY 1113* (or Student Choice – see below)	4
Social & Behavioral Sciences	Major requirement: AEDECON 2001 or ECON 2001.01 * (or Student Choice – see below)	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

Minimum Total Credit Hours:	121
Open Electives:	2-10
Major:	52
Degree Requirements:	26-29
General Education:	33-38

^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.

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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 3200	Intro to Horticulture	3
HCS 3310	Crop Responses to the Environment	3
HCS 3320	Plant Propagation	3
HCS 3521	Greenhouse Systems and Management	2
HCS 4300	Hydroponic Crop Production	2
HCS 4301	Hydroponic Crop Production Lab	1
HCS 5200 -or- HCS	Advanced Horticultural Systems -or-	3
5602	Ecology of Agriculture (Capstone)	
ENTMLGY 5610	Greenhouse Plant Health and Pest Management	3
GEOG 5900	Weather, Climate, and Global Warming	3
PLNTPTH 3001	General Plant Pathology	3
Major Electives: Sele	ect 15 credit hours from:	
HCS 2305	Organic Gardening	1
HCS 2306	Sustainable Vegetable Production Practicum	3
HCS 2307	Sustainable Agriculture Practical Experience	2
HCS 2340.01	Woody Ornamental Plants	3
HCS 2340.02	Herbaceous Ornamental Plants	3
HCS 3380	Latino Workforce in Land Based Industries	2
HCS 3420	Seed Science	3
HCS 3488.01	Professional Development in Hort. And Crop Science	1-3
HCS/AGSYSMT 3585 or 3586	Digital Agriculture <mark>/with Laboratory</mark> ❖	3 <mark>-4</mark>
HCS 4520	Medicinal Plants	3
HCS 4998 °	Undergraduate Research	1-6
HCS 4999 °	Research with Distinction	1-6
HCS 4999H °	Honors Research with Distinction	1-6
HCS 5097.03-04 &		
5797.03-04	Study Abroad Predeparture & Study Abroad	4
HCS 5325	Plant Genetics	3
HCS 5450	Vegetable Crop Production and Physiology	3
HCS 5460	Fruit Crop Physiology and Production	3
HCS 5621	Physiology of Cultivated Plants	3
HCS 5887	Introduction to Experimental Design	3
HORTTEC 3560	Integrated Greenhouse Climate Control	<mark>4</mark>

^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.

Minor Equivalent (15-18 hours)

Select 15-18 credits from one of the groups below (courses selected as major elective options cannot also count in the minor equivalent):

Group A: Production and Management

Group A: Production and Management		
Course	Title	Hours
AEDECON 2400	Diversity in the Workplace: Challenges and Opportunities	3
AEDECON 2500	Introduction to Sustainability ❖	3
AEDECON 3101	Principles of Agribusiness Management	3
AEDECON 3102	Principles of Agribusiness Marketing	3
AEDECON 3103	Principles of Agribusiness Finance	3
AEDECON 3160	Human Resource Management in Small Business	3
AGSYSMT 2193 d	Individual Studies	1-2
AGSYSMT 2240	Basic Metal Fabrication for Agriculture	3
AGSYSMT 2310	Electrical Power for Agricultural and Residential Applications	2
AGSYSMT 3232	Engines and Power Transmission	3
AGSYSMT 3320	Facilities for Agricultural and Greenhouse Production	3
HCS/AGSYSMT 3585 or 3586	Digital Agriculture/with Laboratory (if not taken as major elective)	3 <mark>-4</mark>
AGSYSMT 5560	UAS and Remote Sensing in Agriculture	3
BUSMHR 2210	Personal Leadership & Team Effectiveness	3
BUSML 3150	Foundations of Marketing	3
CONSCI 2910	Consumer Problems and Perspectives	3
CSHSPMG 3910	Customer Experience Management	3
CONSYSM 2205	Introduction to Construction Systems Management	3
CONSYSM 2241	Construction Materials and Methods II	3
CONSYSM 2440	Construction Surveying and Site Development	4
ENR 3000	Soil Science	3
ENR 3001	Soil Science Laboratory	1
ENR 5279	Urban Soils and Ecosystem Services	3
ENTMLGY 4600	Introduction to Insect Science	1
ENTMLGY 4601	General Insect Pest Management	2
ENTMLGY 5500	Biological Control of Arthropod Pests	3
ENTMLGY 5600	Integrated Pest Management	3
ENTMLGY 5800	Pesticide Science	3
FABENG 2100	Energy in Biological Systems	1
FABENG 3120	Thermodynamics in Food, Agricultural and Biological Engineering	4
FABENG 3130	Heat and Mass Transfer in Food, Agricultural and Biological Engineering	4
PLNTPTH 3002	General Plant Pathology Lab	2
PLNTPTH 5110	Ecology and Management of Pathogens and Insects Affecting Trees in Forest and Urban Environments	3
PLNTPTH 5120	Diseases of Ornamental Plants	3
PLNTPTH 5150	Diseases of Vegetable and Fruit Crops	2
PLNTPTH 5603	Plant Disease Management	3

Group B: Research		
CHEM 2310 ^d	Introductory Organic Chemistry	4
BIOCHEM 4511	Introduction to Biological Chemistry	4
EEOB 3310.01 or 3310.02	Evolution	4
EEOB 3410	Ecology	4
ENR 5268	Soils and Climate Change	3
ENR 5274	Ecosystems Simulation	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 <u>not</u> 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.
- ^e Minimum cumulative GPA of 2.5 required for enrollment.



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Literary, Visual and Performing Arts	Student Choice	3
Historical & Cultural Studies	Student Choice	3
Natural Science	Major requirement: BIOLOGY 1113 * <i>(or</i> <i>Student Choice</i> – <i>see below)</i>	4
Social & Behavioral Sciences	Major requirement: AEDECON 2001 or ECON 2001.01 * (or Student Choice – see below)	3
Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World ^a	Student Choice	4-6
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33-38	General Education:
26-29	Degree Requirements:
52	Major:
2-10	Open Electives:
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