

# Agricultural and Environmental Plant Sciences Major

## Summer, 2020 – Spring, 2021 Projected Course Offerings\*

Course	Course Title	Summer	Fall	Winter	Spring	Prerequisites**
AEPS 101	Orientation to Horticulture and Crop Science		✓			None.
AEPS 110	People, Pests and Plagues		✓	✓	✓	None. Note: <b>Not open to AEPS or WVIT majors (Viticulture concentration).</b>
AEPS 120	Principles of Horticulture and Crop Science		✓	✓	✓	None.
AEPS 123	Landscape Installation and Maintenance			✓		AEPS 120.
AEPS 124	Plant Propagation				✓	AEPS 120 and BOT 121.
AEPS 126	Landscape Construction					AEPS 120.
AEPS 127	Horticulture and Landscape Design		✓			None.
AEPS 132	Pomology I			✓		AEPS 120. Note: <b>Not open to students with credit in AEPS 250.</b>
AEPS 133	Pomology II				✓	AEPS 132.
AEPS 150	Forage Crops		✓			None.
AEPS 175	Beekeeping		✓		✓	None.
AEPS 190	California Vegetable Production				✓	AEPS 120.
AEPS 200	Special Problems for Undergraduates	✓	✓	✓	✓	Consent of instructor.
AEPS 203	Organic Enterprise		✓	✓	✓	None.
AEPS 205	Orchard and Vegetable Enterprise Project		✓	✓	✓	None.
AEPS 212	Environmental Horticulture Enterprise Project I		✓	✓	✓	None.

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AEPS 215	Floral Design I		✓	✓		None.
AEPS 225	Floral Design II				✓	AEPS 215.
AEPS 230	Environmental Horticulture					None. Note: <b>Not open to AEPS majors.</b>
AEPS 233	Plant Materials I				✓	None.
AEPS 234	Plant Materials II		✓			None.
AEPS 240	Commercial Seed Production				✓	AEPS 120 or AEPS 260. <b>Offered odd years only.</b>
AEPS 244	Precision Farming			✓		AEPS 133 or AEPS 190 or AEPS 260 or BRAE 237 or BRAE 239. Crosslisted as BRAE 244. <b>[This course is offered only as AEPS 244.]</b>
AEPS 245	Horticultural Production Techniques		✓			None.
AEPS 270	Selected Topics					Open to undergraduate students and consent of instructor.
AEPS 301	Principles of Landscape Design					AEPS 127, and AEPS 233 or AEPS 234.
AEPS 304	Plant Breeding			✓	✓	AEPS 120 and STAT 218. Recommended: One of the following: AEPS 132, AEPS 190, AEPS 230, AEPS 245, AEPS 250, or WVIT 233.
AEPS 312	Environmental Horticulture Enterprise Project II		✓	✓	✓	Consent of instructor.
AEPS 313	Agricultural Entomology		✓		✓	AEPS 120 or BOT 121; and one of the following: CHEM 110, CHEM 111 or CHEM 127.
AEPS 315	Principles of Organic Crop Production		✓		✓	Junior standing; completion of GE Area A with grades of C- or better; completion of GE Area B1 with a grade of C- or better in at least one of the courses; and completion of GE Areas B2, B3, and B4. Note: Fulfills GE Area F or B7. Crosslisted as AG 315. <b>[Offered only as AEPS 315.]</b>

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AEPS 321	Weed Biology and Management		✓		✓	AEPS 120 or BOT 121.
AEPS 323	Plant Pathology		✓	✓	✓	BIO 162 or BOT 121. Crosslisted as BOT 323. [This course is offered only as AEPS 323.]
AEPS 327	Vertebrate Pest Management			✓		Junior standing.
AEPS 329	Plants, Food, and Biotechnology		✓			Junior standing; completion of GE Area A with grades of C- or better; completion of one course in GE Area B1 with a grade of C- or better; and one of the following courses: AEPS 120, BIO 111, BIO 114, BIO 161, or BOT 121. Note: Fulfills GE Area F or B7. Crosslisted as BOT 329. [This course is offered only as AEPS 329.]
AEPS 331	Advanced Viticulture - Fall	✓	✓			WVIT/AEPS 231 or WVIT 232 or WVIT 233. Crosslisted as WVIT 331. [This course is offered only as WVIT 331.]
AEPS 332	Landscape Contracting					AEPS 126 and AEPS 127.
AEPS 333	Greenhouse Vegetable Production		✓			AEPS 120; CHEM 111 or CHEM 127; and SS 221.
AEPS 334	Greenhouse Vegetable Enterprise				✓	AEPS 333.
AEPS 339	Internship in Horticulture and Crop Science	✓	✓	✓	✓	Consent of instructor. Note: Degree credit limited to 6 units.
AEPS 340	Principles of Greenhouse Environment				✓	AEPS 245.
AEPS 341	Cut Flower Production		✓			AEPS 120.
AEPS 342	Potted Plant Production			✓		AEPS 245.
AEPS 343	Turfgrass Management					AEPS 120 or BOT 121; and SS 120 or SS 121.
AEPS 350	Abiotic Plant Problems			✓		AEPS 124; CHEM 111 or CHEM 127; and SS 120 or SS 121.

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AEPS 351	Experimental Techniques and Analysis			✓		Junior standing and MATH 118 or equivalent, and STAT 218.
AEPS 355	Citrus and Avocado Fruit Production				✓	AEPS 120 or AEPS 250. <i>Offered odd years only.</i>
AEPS 381	Native Plants for California Landscapes				✓	BIO 114 or BOT 121; and junior standing.
AEPS 400	Special Problems for Advanced Undergraduates	✓	✓	✓	✓	Consent of instructor.
AEPS 406	Advanced Weed Management			✓		AEPS 321.
AEPS 410	Crop Physiology				✓	AEPS 120 or BIO 263; BIO 162 or BOT 121; and CHEM 216 or CHEM 312.
AEPS 414	Grape Pest Management		✓			AEPS/WVIT 231, WVIT 232 or WVIT 233; AEPS 313; AEPS/BOT 323. Crosslisted as WVIT 414. <i>[This course is offered only as WVIT 414]</i>
AEPS 420	Organic Crop Production Systems			✓		AEPS 120 or BOT 121; SS 120; and junior standing.
AEPS 421	Postharvest Technology of Horticultural Crops			✓		Junior standing.
AEPS 423	Advanced Vegetable Science					AEPS 190 or AEPS 260.
AEPS 424	Nursery Crop Production			✓		AEPS 124. <i>[This course offered odd years, only.]</i>
AEPS 425	Arboriculture				✓	AEPS 123, AEPS 233, and AEPS 234 or NR 208 for FNR majors.
AEPS 427	Disease and Pest Control Systems for Ornamental Plants			✓		AEPS 120, AEPS 313, AEPS 321, and AEPS/BOT 323.
AEPS 431	Insect Pest Management				✓	AEPS 313.
AEPS 432	Specialized Operations for Golf Courses and Athletic Fields					AEPS 343. Not open to students with credit in AEPS 430 or AEPS 433.

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AEPS 434	Landscape Management					AEPS 123 and AEPS 126 and junior standing.
AEPS 435	Advanced Landscape Design					AEPS 233, AEPS 234, AEPS 301. Recommended: AEPS 381.
AEPS 445	Cropping Systems			✓		AEPS 120; or BOT 121 and SS 120 or SS 121; or graduate standing. [This course offered <i>odd years, only.</i> ]
AEPS 450	Current Issues in the Strawberry Industry				✓	AEPS 120. Corequisite: Bot 121.
AEPS 461	Senior Project I		✓	✓	✓	Junior standing, completion of GE Area A1 with a grade of C- or better, and STAT 218.
AEPS 462	Senior Project II	✓	✓	✓	✓	Consent of instructor.
AEPS 470	Selected Advanced Topics: Advances in Plant Pathology					Consent of instructor. Recommended: AEPS 323.
AEPS 471	Selected Advanced Laboratory					Consent of instructor.
AEPS 500	Individual Study in Horticulture and Crop Science	✓	✓	✓	✓	Consent of instructor. Total credit limited to 6 units.
AEPS 539	Graduate Internship in Horticulture and Crop Science	✓	✓	✓	✓	Consent of instructor. Degree credit limited to 6 units.
AEPS 570	Selected Topics in Horticulture and Crop Science					Consent of instructor. Total credit limited to 12 units.
AEPS 571	Selected Topics Laboratory in Horticulture and Crop Science					Consent of instructor. Total credit limited to 12 units.
AEPS 575	Applied Systematics for Agriculture					Graduate standing. Recommended: a course in basic entomology, plant pathology, and weed science. [This course offered <i>even years, only.</i> ]
AEPS 581	Graduate Seminar in Crop/Fruit Production			✓		Graduate standing. [This course offered <i>odd years, only.</i> ]
AEPS 596	Thesis in Crop Science		✓	✓	✓	Graduate standing and consent of instructor. Degree credit limited to 6 units.

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AEPS 597	Thesis in Environmental Horticultural Science		✓	✓	✓	Graduate standing and consent of instructor. Degree credit limited to 6 units.
AEPS 598	Thesis in Fruit Science		✓	✓	✓	Graduate standing and consent of instructor. Degree credit limited to 6 units.
AEPS 599	Thesis in Plant Protection Science		✓	✓	✓	Graduate standing and consent of instructor. Degree credit limited to 6 units. Total credit limited to 9 units.

### Support Courses for AEPS Major

Course	Course Title	Summer	Fall	Winter	Spring	Prerequisites**
AGB 214	Agribusiness Financial Accounting		✓	✓	✓	None.
BOT 121	General Botany		✓	✓	✓	None.
BRAE 340	Irrigation Water Management		✓	✓	✓	MATH 118; junior standing; completion of GE Area A with grades of C- or better; completion of GE Area B1 with a grade of C- or better in at least one of the courses; and completion of GE Areas B2, B3, and B4. Fulfills GE Areas B7 or F.
BUS 212	Financial Accounting for Nonbusiness Majors		✓	✓	✓	None.
CHEM 127	General Chemistry for Agriculture and Life Science I	✓	✓	✓	✓	MATH 118 or MATH 330. Recommended: High school chemistry or equivalent. Credit will be granted in only one of the following courses: CHEM 110, CHEM 111, or CHEM 127.
CHEM 128	General Chemistry for Agriculture and Life Science II	✓	✓	✓	✓	CHEM 127 or AP Chemistry score of 5.
CHEM 312	Survey of Organic Chemistry	✓	✓	✓	✓	CHEM 125 or CHEM 128. Not open to students with credit in CHEM 212 or CHEM 216/316.

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MATH 118	Pre-Calculus Algebra	✓	✓	✓	✓	Appropriate Math Level Placement. Not open to students with credit in MATH 117, MATH 141, MATH 161, or MATH 221.
SPAN 101	Elementary Spanish I		✓	✓	✓	None. Not open to students with credit in SPAN 104, SPAN 111, or SPAN 141.
SPAN 102	Elementary Spanish II		✓	✓	✓	SPAN 101, SPAN 111, SPAN 141, or appropriate score on placement exam or consent of instructor. Not open to students with credit in SPAN 104 or SPAN 142.
SPAN 103	Elementary Spanish III		✓	✓	✓	SPAN 102, SPAN 142, or appropriate score on placement exam or consent of instructor. Not open to students with credit in SPAN 104 or SPAN 143.
SPAN 111	Elementary Hispanic Language and Culture			✓		None. Not open to students with credit in SPAN 101 or SPAN 141. Fulfills USCP.
SS 120	Introductory Soil Science		✓	✓	✓	None. Formally SS 121.
SS 221	Fertilizers and Plant Nutrition		✓	✓	✓	SS 120 or SS 121.
STAT 218	Applied Statistics for the Life Sciences	✓	✓	✓	✓	MATH 96; or MATH 115; or appropriate Math Placement Level. Not open to students with credit in STAT 217 or STAT 251.

**Concentration Approved Electives: Extra-departmental Courses**

Course	Course Title	Summer	Fall	Winter	Spring	Prerequisites**
AG/ASCI 360	Holistic Management		✓	✓	✓	Junior standing; completion of GE Area A with grades of C- or better; completion of GE Area B1 with a grade of C- or better in at least one of the courses; and completion of GE Areas B2, B3, and B4. Crosslisted as AG/ASCI 360. Fulfills GE Area B7 or F.

Course	Course Title	Summer	Fall	Winter	Spring	Prerequisites**
BRAE 337	Landscape Irrigation			✓		MATH 118.
BRAE 405	Chemigation					BRAE 236 or BRAE 340; or graduate standing.
BRAE 438	Drip/Micro Irrigation			✓		BRAE 236 or BRAE 340; or graduate standing.
BRAE 440	Agricultural Irrigation Systems				✓	BRAE 340 or graduate standing.
BUS 346	Principles of Marketing	✓	✓	✓	✓	ECON 222 with a grade of C- or better for Business Administration and Economics majors; or ECON 201 with a grade of C- or better for Industrial Technology majors; or ECON 201 or ECON 222 with a grade of C- or better for all other majors; or consent of instructor.
CHEM 313	Survey of Biochemistry and Biotechnology	✓	✓	✓	✓	CHEM 212, CHEM 216, CHEM 312, or CHEM 316.
FSN 275	Elements of Food Safety					None.
MCRO 221	Microbiology	✓	✓	✓	✓	CHEM 110 or CHEM 111 or CHEM 124 or CHEM 127 or PSC 102.
SS 321	Soil Morphology		✓	✓	✓	SS 120 or SS 121.
SS 322	Soil Plant Relationships					One of the following: AEPS 120, BOT 121, or SS 120; and CHEM 124 or CHEM 127.
WVIT 233	Basic Viticulture	✓	✓	✓		AEPS 120 or BOT 121; CHEM 127; and SS 120. Not open to students with credit in WVIT 231.
WVIT 331	Advanced Viticulture – Fall	✓	✓			WVIT/AEPS 231 or WVIT 232 or WVIT 233.
WVIT 332	Advanced Viticulture - Winter			✓		WVIT/AEPS 231 or WVIT 232 or WVIT 233.
WVIT 333	Advanced Viticulture - Spring				✓	WVIT/AEPS 231 or WVIT 232 or WVIT 233.



Updated 2-29-20

\* Though every attempt is made to accurately project what will be offered in the coming year, course offerings may change due to instructor availability and/or budgetary constraints. Winter and Spring, 2021 courses are based on what was taught Winter and Spring, 2020.

\*\* Prerequisites are those described in the 2019-2020 catalog.