2011-13 Cal Poly Catalog

Horticulture and Crop Science Department

BS AGRICULTURAL AND ENVIRONMENTAL PLANT SCIENCES

☐ 60 units upper division  ☐ GWR
☐ 2.0 GPA  ☐ USCP

* = Required in Support; also satisfies GE

Note: No major, support or concentration courses may be taken as credit/no credit unless so listed.

MAJOR COURSES

HCS 110 Orientation to Horticulture/Crop Science 2
HCS 120 Principles of Horticulture/Crop Science ... 4
HCS 124 Plant Propagation.......................... 4
HCS 304 Plant Breeding............................. 4
HCS 327 Abiotic Plant Problems..................... 3
HCS 410 Crop Physiology ................................ 4
HCS 461 Senior Project I................................ 2
HCS 462 Senior Project II.............................. 2
HCS 463 Senior Seminar................................ 1
PPSC 311 Agricultural Entomology.................. 4
PPSC 321 Weed Biology and Management........... 4
BOT 121 General Botany (B2 & B4)*................. 4
BOT 323 Plant Pathology................................ 4
SS 121 Introductory Soil Science..................... 4
Concentration courses (see below).................... 42

SUPPORT COURSES

BRAE 340 Irrigation Water Mgmt (Area F)*.......... 4
BUS 212 Financial Acctg/Nonbusiness Majors....... 4
CHEM 111 Survey of Chemistry (B3&B4)*............ 5
CHEM 312 Survey of Organic Chemistry............. 5
ECON 201 Survey of Economics (D2)*................ 4
MATH 118 Pre-Calculus Algebra (B1)*................. 4
SPAN 111 Elem Hispanic Lang/Culture (USCP).... 4
SS 221 Fertilizers and Plant Nutrition.............. 4
STAT 218 Applied Statistics/Life Sciences (B1)* 4

GENERAL EDUCATION (GE)

72 units required, 24 of which are specified in Support.
→See page 39 for complete GE course listing

Area A Communication (12 units)

A1 Expository Writing .................................. 4
A2 Oral Communication .................................. 4
A3 Reasoning, Argumentation, and Writing......... 4

Area B Science and Mathematics (no additional units req’d)

B1 Mathematics/Statistics * 8 units in Support .... 0
B2 Life Science * 4 units in Support ................. 0
B3 Physical Science * 4 units in Support .......... 0
B4 One lab taken with either a B2 or B3 course ....

Area C Arts and Humanities (20 units)

C1 Literature............................................. 4
C2 Philosophy.......................................... 4
C3 Fine/Performing Arts............................... 4
C4 Upper-division elective............................ 4
Area C elective (Choose one course from C1-C4) 4

Area D/E Society and the Individual (16 units)

D1 The American Experience (4040)............... 4
D2 Political Economy * 4 units in Support .......... 0
D3 Comparative Social Institutions............... 4
D4 Self Development (CSU Area E)................... 4
D5 Upper-division elective........................... 4

Area F Technology Elective (upper division)

* 4 units in Support.................................... 0

FREE ELECTIVES ....................................... 6
180

CONCENTRATIONS (select one)

Crop Science Concentration

VGSC 190 California Vegetable Production ........ 4
VGSC 202 or CRSC 203 Enterprise Project .......... 2
HCS 231 Commercial Seed Production............... 4
CRSC 411 Experimental Techniques/Analysis...... 4
HCS 421 Postharvest Technology/Hort Crops...... 4
CRSC 445 Cropping Systems........................ 4

Approved electives.................................. 20

Select 20 units from the following:

AG 315, 360; AGB 301, 310, 312, 321, 336, 401;
CRSC 123, 244, 333;
CRSC 402 or VGSC 402;
FRSC 132, 231, 331, 342;
HCS 200†, 339†, 340, 400†, 450;
PPSC 327, 405, 421, 427, 431, 441;
SS 321, 322;
VGSC 423

Corrected (10/22/12)

FRSC 132, 244, 333;
CRSC 402 or VGSC 402;
FRSC 132, 231, 331, 342;
HCS 200†, 339†, 340, 400†, 450;
PPSC 327, 405, 421, 427, 431, 441;
SS 321, 322;
VGSC 423

Fruit Science Concentration

FRSC 123 Beekeeping.................................. 3
FRSC 132, 133 Pomology I, II......................... 4,4
FRSC 202 Enterprise Project........................ 2
FRSC 231, 331 Viticulture I, II.................... 4,4
FRSC 342 Citrus and Avocado Fruit Production ... 4
CRSC 411 Experimental Techniques and Analysis 4
HCS 421 Postharvest Technology/Hort Crops...... 4

Approved electives.................................. 9

Select 9 units from the following:

AGB 260, 301, 310, 315, 321, 401;
CRSC 333, 445;
CRSC 402 or FRSC 402 or VGSC 402;
FRSC 415;
HCS 200†, 339†, 400†, 450;
PPSC 327, 405, 414, 421, 431, 441;
SS 321, 322;
VGSC 190 or 230, 423; WVIT 433

1 Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

2 May substitute 1 unit of any upper-division free elective. (12/11/14)
Greenhouse and Nursery Plant Production Concentration

- EHS 127 Horticulture and Landscape Design ............. 4
  1 EHS 210 or EHS 310 Enterprise Project (I or II) ....... 2
- EHS 231, 232 Plant Materials I, II ...................... 4,4
- EHS 245 Horticultural Production Techniques .......... 3
- EHS 315 Herbaceous & Specialty Plant Production .... 4
- EHS 342 Potted Plant Production ......................... 4
- HCS 340 Principles of Greenhouse Environment ....... 4
- PPSC 427 Disease and Pest Control Systems for Ornamental Plants.......................... 4

2 Approved electives ........................................... 9

Select 9 units from the following:
- AGB 401;
- BUS 310, 346, 409;
- CRSC 333;
- EHS 210 or 310, 324, 341, 381, 382, 402, 424;
- HCS 200i, 339i, 400i, 421;
- PPSC 327, 405, 421, 431, 441

Plant Protection Science Concentration

- CRSC 411 Experimental Techniques and Analysis 4
- FRSC/VGSC 202 or CRSC/FRSC/VGSC 402 or EHS 210/310 Corrected (7/2/12) .............. 2
- PPSC 327 Vertebrate Pest Management ................. 4
- PPSC 405 Advanced Weed Management................ 4
- PPSC 421 Plant-Pest Interactions or AEPS 427 (6/25/15) ................. 4
- PPSC 431 Insect Pest Management .................... 4
- PPSC 441 Biological Control for Pest Management 4

2 Approved electives ........................................... 16

Select 16 units from the following:
- AG 315;
- BIO 114;
- BOT 326;
- BRAE 331;
- CHEM 313;
- CRSC 123, 244, 333, 445;
- EHS 245, 315, 341, 342, 343;
- FRSC 132, 133, 231, 331, 342;
- HCS 200i, 231, 339i, 340, 400i, 421, 450;
- MCRO 221, 436;
- PPSC 427;
- SS 322, 422;
- VGSC 190

Public Horticulture Concentration

- EHS 123 Landscape Installation and Maintenance ...... 4
- EHS 127 Horticulture and Landscape Design .......... 4
- EHS 231, 232 Plant Materials I, II ..................... 4,4
- EHS 343 Turfgrass Management........................... 4
- EHS 437 Park and Public Space Management .......... 4
- PPSC 427 Disease and Pest Control Systems for Ornamental Plants.......................... 4

2 Approved electives ........................................... 14

Select 14 units from the following:
- BRAE 331, 337;
- EHS 215, 225, 301, 324, 381, 382, 402, 421, 427, 434;
- HCS 200i, 339i, 340, 400i;
- PPSC 405, 431, 441

May take up to two (2) courses from the following:
- BOT 313, 326, 335;
- PPSC 431, Corrected (3/14/13)
- SS 310, 433

Sustainable Landscape Management and Design Concentration

- EHS 123 Landscape Installation and Maintenance ...... 4
- EHS 126 Landscape Construction.......................... 3
- EHS 127 Horticulture and Landscape Design .......... 4
- EHS 231, 232 Plant Materials I, II ..................... 4,4
- EHS 331 Landscape Contracting ......................... 4
- EHS 343 Turfgrass Management........................... 4

2 Approved electives ........................................... 15

Select 16 units from the following:
- AGB 401;
- BRAE 331, 337;
- EHS 301, 324, 381, 382, 421, 433, 434, 427, 437;
- HCS 200i, 339i, 400i;
- PPSC 327, 405, 421, 431, 441

Corrected (11/19/12)

Turfgrass and Sports Field Management Concentration

- EHS 231, 232 Plant Materials I, II ..................... 4,4
- EHS 343 Turfgrass Management........................... 4
- EHS 430 Sports Field Construction/Management...... 4
- EHS 433 Golf Course Management Operations ....... 4
- EHS 434 Landscape Management .......................... 4
- HCS 339 Internship in Horticulture/Crop Science ... 4
- PPSC 427 Disease and Pest Control Systems for Ornamental Plants.......................... 4

2 Approved electives ........................................... 10

Select 10 units from the following:
- BOT 326;
- BRAE 331, 337;
- CRSC 411;
- EHS 301, 324, 381, 421, 437;
- HCS 200i, 400i;
- PPSC 327, 405, 431;
- SS 310, 322

2 Approved electives ........................................... 10

1 The course selected to satisfy this requirement may not be taken again for credit as an approved elective.

2 Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

† HCS 200 and 400 up to 2 units each; HCS 339 up to 4 units.