

**Horticulture and Crop Science Department**  
**2011-2013 Cal Poly Catalog**  
**BS AGRICULTURAL AND ENVIRONMENTAL PLANT SCIENCES**

**Agriculture Sciences Bldg (11), Room 230**  
**(805) 756-2279/1237**

**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 Hort. & 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
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**GENERAL EDUCATION (GE)**

72 units required, 24 of which are specified in Support.

→See page 56 for complete GE course listing.

→Minimum of 12 units required at the 300 level.

**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 (40404)	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
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**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
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<b>FREE ELECTIVES</b>	<b>6</b>
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	180

**CONCENTRATIONS (7 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
1 Approved electives.	20

Select 20 units from the following:

- AG 315, 360;
- AGB 301, 310, 312, 321, 336, 401;
- CRSC 123, 244, 333;
- CRSC 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

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**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
1 Approved electives.	9

Select 9 units from the following:

- AGB 260, 301, 310, 315, 321, 401;
- CRSC 333, 445;
- CRSC or FRSC 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

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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.

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

### Greenhouse and Nursery Plant Production Concentration

EHS 127 Horticulture and Landscape Design .....	4
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
1 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 200†, 339†, 400†, 421;  
PPSC 327, 405, 421, 431, 441

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### Plant Protection Science Concentration

CRSC 411 Experimental Techniques and Analysis	4
FRSC/VGSC 202 or CRSC/FRSC/VGSC 402 or EHS 210/310/402 .....	2
PPSC 327 Vertebrate Pest Management .....	4
PPSC 405 Advanced Weed Management .....	4
PPSC 421 Plant-Pest Interactions .....	4
PPSC 431 Insect Pest Management .....	4
PPSC 441 Biological Control for Pest Management	4
1 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 200†, 231, 339†, 340, 400†, 421, 450;  
MCRO 221, 436;  
PPSC 427;  
SS 322, 422;  
VGSC 190

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### 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
1 Approved electives. ....	14

Select 14 units from the following:

BRAE 331, 337;  
EHS 215, 225, 301, 324, 381, 382, 402,  
421, 427, 434;  
HCS 200†, 339†, 340, 400†;  
PPSC 405, 431, 441

May take up to two (2) courses from the  
following:

BOT 313, 326, 335;  
RPTA 330;  
SS 310, 433

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### 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
1 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 200†, 339†, 400†;  
PPSC 327, 405, 421, 431, 441

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### 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
1 Approved electives. ....	10

Select 10 units from the following:

BOT 326;  
BRAE 331, 337;  
CRSC 411;  
EHS 301, 324, 381, 421, 437;  
HCS 200†, 400†;  
PPSC 327, 405, 431;  
SS 310, 322

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