

Department of

Horticulture

**Jerry Toll, Department Chair***Daniel Dewey, Byron John, Reese Nelson, Ben Romney, Jerry Toll**Janet Ruud, Secretary (208) 496-4580**Forrest Barnes, Greenhouse/Garden Manager**<http://www.byui.edu/horticulture/>***Mission Statement**

Our aim at Brigham Young University-Idaho Horticulture Department is to nurture understanding of both the art and science of Horticulture. Students learn experientially in the classroom, laboratory, greenhouse, and ten-acre Thomas E. Ricks demonstration garden as they pursue an Associates or Bachelors Degree. Using the medium of plants, students develop habits of hard work, enlightened minds, and healthy living that assist in gainful employment opportunities.

Career Opportunities

The Department is a recognized leader in horticulture education preparing students for expanding career opportunities in nurseries, garden centers, florist's shops, floral wholesalers, plant brokers, landscape contractors, lawn service companies, interiorscape companies, greenhouses, golf courses, parks, botanical gardens, landscape management, event planning, design build, plant production, plant breeding, horticulture sales and marketing, and horticulture supply companies. Demand for graduates is strong and most students can choose from several job offers throughout the nation.

Students who seek advanced degrees find opportunities in horticulture teaching, research, extension education, and government service.

Degree Programs include:

Bachelor of Science - Horticulture (695) is a 4 year Horticulture degree. Students can choose from three emphasis areas:

- **Floral Design (695-16):** provides training in retail and wholesale floral marketing, artistry of wedding and event flowers, and interpretive and competitive design.
- **Design/Build/Maintain (695-14):** emphasizes the design, installation and management of landscapes, including irrigation systems, plant maintenance, and bidding and estimating.
- **Production (695-15):** focuses on the retail/wholesale markets of nurseries, garden centers, cut flowers, vegetables, fruits and greenhouse operations.

Associate of Horticulture Management (354) two year Associate of Applied Science degree offering the basics of horticulture, including landscaping, plant propagation, and pest control.

Associate of Floral Design Management (353) two year Associate of Applied Science degree offering the basics of floral design, including weddings, event flowers and marketing.

Minor in Horticulture (204) - a minor is available for those not majoring in Horticulture

Horticulture Clusters - two clusters are offered

- Event Planning Cluster
- Horticulture Cluster

Courses which develop skills in home gardening, floral design and landscape beautification are available to the general student body.

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AAS in Floral Design Management (353)

Take required Foundations courses

Major Requirements

No Double Counting of Major Courses

CORE COURSES	DESIGN COURSES	ELECTIVE COURSES	Cont. from previous column:	Program Notes:
<i>Take these courses:</i>	<i>Take 1 course:</i>	<i>Take 2 credits:</i>	HFED 110	2
HORT 201	ART 101	AGBUS 232	HFED 140	3
HORT 287R	HFED 140	AGRON 220	HORT 230	3
HORT 288	HORT 230	AGRON 220L	HORT 287R	1
HORT 297R		ART 101	HORT 290R	1-3
HORT 320		ART 102	HORT 334	3
HORT 324	SEMINAR	ART 103	HORT 412	3
HORT 325	<i>Repeat 2 times:</i>	ART 110	HORT 460	2
HORT 335	HORT 299R	ART 160	ID 102	2
HORT 336		ART 220	SIGN 101	3
HORT 337		ART 280	SPAN 101	4
HORT 338A	INTERNSHIP	AUTO 100		2
HORT 338B	<i>Take this course for 1 credit:</i>	B 341		
HORT 435	HORT 298R	B 275		
24.5		CA 131		
		<i>Cont. next column</i>		
	WEDDING FLOWERS			
	<i>Repeat this course 1 to 2</i>			
	<i>times for a total of 2 credits:</i>			
	HORT 338R			

Total Major Credits=33.5

This major is available on the following tracks:

Fall-Winter---- YES

Winter-Spring---- YES

Spring-Fall---- YES

AAS in Horticulture Management (354)

Take required Foundations courses

Major Requirements

No Double Counting of Major Courses

CORE COURSES	SEMINAR	ELECTIVE COURSES	Program Notes:
<i>Take these courses:</i>	<i>Repeat 2 times:</i>	<i>Take 5 credits:</i>	
AGRON 220	HORT 299R	AGBUS 232	
AGRON 220L		AGTEC 220	
HORT 201		HORT 252	
HORT 230	INTERNSHIP	HORT 311	
HORT 288	<i>Take this course for 1 credit:</i>	HORT 325	
HORT 297R	HORT 298R	HORT 329	
HORT 319		HORT 334	
HORT 320		HORT 335	
HORT 321		HORT 338A	
HORT 322		HORT 338R	
HORT 324		HORT 340	
HORT 412		HORT 351	
26.5		HORT 410	
		HORT 420	
		HORT 430	
		HORT 455	
		HORT 460	
		HORT 461	
		HORT 470	
		5	

Total Major Credits=33.5

This major is available on the following tracks:

Fall-Winter---- YES

Winter-Spring---- YES

Spring-Fall---- YES

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BS in Horticulture				
Design/Build/Maintain Emphasis (695-14)				
Take required Foundations courses				
Major Requirements				
<i>No Double Counting of Major Courses</i>				
CORE COURSES		SEMINAR	EMPHASIS COURSES	ELECTIVE COURSES
<i>Take these courses:</i>		<i>Repeat 3 times:</i>	<i>Take these courses:</i>	<i>Take 4 credits:</i>
AGRON 220 3		HORT 299R 0.5	HORT 252 4	AGBUS 232 3
AGRON 220L 1		1.5	HORT 319 3	AGTEC 220 3
HORT 201 3			HORT 321 2	ENG 316 3
HORT 230 3		INTERNSHIP	HORT 329 2	HORT 290R 1-3
HORT 288 0.5		<i>Take this course for 1 credit:</i>	HORT 340 2	HORT 311 2
HORT 297R 1		HORT 298R 1.5	HORT 351 2	HORT 325 2
HORT 320 3		1	HORT 410 3	HORT 334 3
HORT 322 2			HORT 430 3	HORT 336 1
HORT 324 2			HORT 453 3	HORT 337 1
HORT 335 3			24	HORT 338A 2
HORT 412 3				HORT 338R 1-2
<u>24.5</u>				HORT 350R 1
				HORT 410 3
				HORT 420 3
				HORT 455 2
				HORT 460 2
				HORT 461 2
				HORT 470 2
				<u>4</u>
Total Major Credits=55				
This major also requires a minor or 2 clusters				
This major is available on the following tracks:				
Fall-Winter---- YES		Winter-Spring---- YES		Spring-Fall---- YES

BS in Horticulture				
Production Emphasis (695-15)				
Take required Foundations courses				
Major Requirements				
<i>No Double Counting of Major Courses</i>				
CORE COURSES		SEMINAR	EMPHASIS COURSES	ELECTIVE COURSES
<i>Take these courses:</i>		<i>Repeat 3 times:</i>	<i>Take these courses:</i>	<i>Take 6 credits:</i>
AGRON 220 3		HORT 299R 0.5	AGBUS 232 3	AGTEC 220 3
AGRON 220L 1		1.5	HORT 321 2	HORT 252 4
HORT 201 3			HORT 325 2	HORT 290R 1-3
HORT 230 3		INTERNSHIP	HORT 334 3	HORT 311 2
HORT 288 0.5		<i>Take this course for 1 credit:</i>	HORT 375 1	HORT 319 3
HORT 297R 1		HORT 298R 1.5	HORT 420 3	HORT 329 2
HORT 320 3		1	HORT 455 2	HORT 336 1
HORT 322 2			HORT 460 2	HORT 337 1
HORT 324 2			HORT 461 2	HORT 338A 2
HORT 335 3			HORT 470 2	HORT 338R 1-2
HORT 412 3			22	HORT 340 2
<u>24.5</u>				HORT 350R 1
				HORT 351 2
				HORT 410 3
				HORT 430 3
				HORT 453 3
				<u>6</u>
Total Major Credits=55				
This major also requires a minor or 2 clusters				
This major is available on the following tracks:				
Fall-Winter---- YES		Winter-Spring---- YES		Spring-Fall---- YES

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BS in Horticulture Floral Design Emphasis (695-16)

Take required Foundations courses

Major Requirements

No Double Counting of Major Courses

CORE COURSES	EMPHASIS COURSES	SUPPLEMENTAL COURSES	SPECIAL PROBLEMS	<i>Program Notes:</i>
<i>Take these courses:</i>	<i>Take these courses:</i>	<i>Take 3 credits:</i>	<i>Take this course for 1 credit:</i>	
AGRON 220 3	HORT 325 2	AGBUS 232 3	HORT 290R <u>1-3</u>	
AGRON 220L 1	HORT 336 1	AGTEC 220 3	1	
HORT 201 3	HORT 337 1	AGTEC 240 3	WEDDING FLOWERS	
HORT 230 3	HORT 338A 2	HORT 252 4	<i>Repeat this course 2 to 3</i>	
HORT 288 0.5	HORT 338B 2	HORT 287R 1	<i>times for a total of 3 credits:</i>	
HORT 297R 1	HORT 338C 2	HORT 290R 1-3	HORT 338R <u>1-2</u>	
HORT 320 3	HORT 435 3	HORT 311 2	3	
HORT 322 2	HORT 436 1	HORT 319 3	FLORAL COURSES	
HORT 324 2	HORT 437 1	HORT 321 2	<i>Repeat each course 2 times:</i>	
HORT 335 3	HORT 460 <u>2</u>	HORT 329 2	HORT 287R 1	
HORT 412 <u>3</u>	17	HORT 334 3	HORT 339R <u>1</u>	
24.5		HORT 339R 1	4	
SEMINAR		HORT 340 2		
<i>Repeat 3 times:</i>		HORT 351 2		
HORT 299R <u>0.5</u>		HORT 410 3		
1.5		HORT 420 3		
INTERNSHIP		HORT 430 3		
<i>Take this course for 1 credit:</i>		HORT 453 3		
HORT 298R <u>1-5</u>		HORT 455 2		
1		HORT 461 2		
		HORT 470 <u>2</u>		
		3		

Total Major Credits=55
This major also requires a minor or 2 clusters

This major is available on the following tracks:

Fall-Winter---- YES

Winter-Spring---- YES

Spring-Fall---- YES

Minor in Horticulture (204)

Minor Requirements

CORE COURSES	ELECTIVE COURSES	Continued from previous column	<i>Program Notes:</i>
<i>Take these courses:</i>	<i>Take 19 credits:</i>		<i>No double counting of minor courses.</i>
HORT 201 3	HORT 230 3	HORT 336 1	
HORT 230 or 335 <u>3</u>	HORT 252 4	HORT 337 1	
6	HORT 287R 1	HORT 338A 2	
	HORT 299R 0.5	HORT 338B 2	
	HORT 311 2	HORT 338R 1-2	
	HORT 319 3	HORT 340 2	
	HORT 320 3	HORT 410 3	
	HORT 321 2	HORT 412 3	
	HORT 322 2	HORT 420 3	
	HORT 324 2	HORT 430 3	
	HORT 325 2	HORT 455 2	
	HORT 329 2	HORT 460 2	
	HORT 334 3	HORT 461 2	
	HORT 335 3	HORT 470 <u>2</u>	
	<i>Continued next column</i>	19	

Total Minor Credits=25

This minor is available on the following tracks:

Fall-Winter---- YES

Winter-Spring---- YES

Spring-Fall---- YES

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Horticulture Pre-approved Clusters

Horticulture	1501	Event Planning Cluster	1500
<i>Take 12 credits:</i>		<i>Take these courses:</i>	
HORT 103	3	AGBUS 232	3
HORT 201	3	HORT 325	2
HORT 230	3	HORT 335	3
HORT 252	4	HORT 338A	2
HORT 287R	1	HORT 338R	1-3
HORT 299R	.05	<i>Take 1 course:</i>	
HORT 311	2	HORT 287R	1
HORT 319	3	HORT 290R	1-3
HORT 320	3	Total Credits	12
HORT 321	2		
HORT 322	2		
HORT 324	2		
HORT 325	2		
HORT 329	3		
HORT 334	3		
HORT 335	3		
HORT 336	1		
HORT 337	1		
HORT 338A	2		
HORT 338B	2		
HORT 338R	1-3		
HORT 340	2		
HORT 410	3		
HORT 412	3		
HORT 420	3		
HORT 430	3		
HORT 455	2		
HORT 460	2		
HORT 461	2		
HORT 470	2		
Total Credits	12		

Some courses may have a prerequisite that must be met in order to take that course.

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Course Descriptions

Course Descriptions	Credits*
HORT 103 Home Gardening Fee: \$20.00 Learn basic principles, culture and production of vegetables, fruits, flowers, trees, shrubs, and turf, as it relates to the home garden and self-reliance. (For non-Hort majors only) This course includes a lecture and lab experience.	(3.0:2:2)
HORT 115 Orientation A survey of career opportunities and skills needed in the horticulture industry. Emphasis is placed on gaining familiarity with the BYU-Idaho campus and systems of learning at the university level.	(0.5:1:0)
HORT 201 Plant Culture Fee: \$105.00 Planting and establishment of horticultural plants in the landscape including lawns, trees, shrubs, vegetables, fruits and flowers.	(3.0:2:3)
HORT 230 Introduction to Architecture/Landscape Design Fee: \$10.00 Enhances the student's understanding of the outdoor environment and how they can contribute to the quality of that environment through design and planning. Also a study of the history of landscape architecture and its effect on man.	(3.0:3:1)
HORT 252 Landscape Construction Fee: \$40.00 Prerequisite: Hort 230, LHM major or consent of instructor. A practical course of layout and construction techniques for landscape projects. Considered are masonry, wood structures, irrigation and plant installations. (Fall, Spring)	(4.0:3:4)
HORT 287R Flower Center Fee: \$20.00 Prerequisite: Hort 335 This course provides training and experience in presentation of flowers in: display windows and coolers, large banquet halls, auditoriums, custom design in residential and commercial settings. Florals skills, shop management techniques, and floral nomenclature are all emphasized. The class is provided as an opportunity to reinforce principles learned in the various floral classes, and to prepare students for internship and retail employment. (Fall, Winter, Spring)	(1.0:0:2)
HORT 288 Occupational Internship Preparation Prerequisite: Hort 201 and 13 additional credits in Horticulture. Horticulture major or consent of instructor. Class preparation for work experience in the florist, landscape or nursery industry. (Fall, Winter, Spring)	(0.5:1:0)
HORT 290R Special problems Prerequisite: Consent of Instructor The student may pursue a subject of interest through independent study under personal direction of a faculty specialist. (Fall, Winter, Spring)	(1.0-3.0:0:0)
HORT 297R Practicum in Horticulture Prerequisite: Hort 201 and 13 additional credits in Horticulture. Horticulture major or consent of instructor. Horticulture Majors. Supervised practical experience for the development and improvement of horticultural skills. Repeatable up to 2 times. (Fall, Winter, Spring)	(1.0:1:1)
HORT 298R Occupational Internship Prerequisite: Bio 208 or Agron 122, 16 additional credits in horticulture. Work experience in the florist, landscape or nursery industry. (Fall, Winter, Spring)	(1.0-5.0:0:0)
HORT 299R Seminar Guest lectures from industry leaders.	(0.5:1:0)
HORT 311 Introduction to Arboriculture Fee: \$15.00 Establishment, culture and maintenance of trees and shrubs in the landscape.	(2.0:1:2)

HORT 319 Landscape Management Fee: \$25.00 Prerequisite: Hort 201 Maintenance of trees, shrubs and turf in landscape, park, golf and athletic areas. (Fall, Spring)	(3.0:2:3)
HORT 320 Plant Propagation Fee: \$15.00 Prerequisite: Hort 201 Principles and practices used in commercial propagation of plants with emphasis on landscape nursery stock. Includes tissue culture, seed germination, grafting, layering, budding, cuttings and other specialized techniques. (Fall, Winter, Spring)	(3.0:2:3)
HORT 321 Deciduous Plant Identification Fee: \$10.00 Identification, landscape value and cultural requirements of deciduous trees, shrubs, and ground covers.	(2.0:1:2)
HORT 322 Evergreen Plant Identification Fee: \$410.00 Identification, landscape value, and special cultural requirements of evergreen trees, shrubs and ground covers. This course includes a lecture and lab experience.	(2.0:1:2)
HORT 324 Flower Identification Fee: \$10.00 Identification, landscape value, and special cultural requirements of annual and perennial flowers.	(2.0:1:2)
HORT 325 Interiorscaping Fee: \$25.00 Identification of indoor plants and their culture. Principles of design as applied to the placement and use of plants. This course includes a lecture and lab experience.	(2.0:1:2)
HORT 329 Irrigation Fee: \$15.00 Prerequisite: Hort 230 Irrigation of turf and landscape plants. Design of irrigation and landscape lighting systems, with selection and assembly of components. (Winter)	(2.0:1:2)
HORT 334 Greenhouse Operations Fee: \$15.00 Prerequisite: Hort 320 Greenhouse construction, environmental control, pest control and plant culture including production of greenhouse floral crops. (Fall, Spring)	(3.0:2:3)
HORT 335 Flower Arranging Fee: \$95.00 Instruction and care in handling of flowers, historical and current application, identification and use.	(3.0:3:1)
HORT 336 Asian Design Fee: \$25.00 Prerequisite: Hort 335 and concurrent enrollment in Hort 337. This course helps students understand the theories of Asian design influence, with particular emphasis on the use of line. Principles of Asian design and their influence on modern American Floral design. (Winter)	(1.0:1:1)
HORT 337 European Design Fee: \$25.00 Prerequisite: Hort 335 and concurrent enrollment in Hort 335. This course establishes a historical understanding of floral design primarily from the influences of Europe. (Winter)	(1.0:1:1)
HORT 338A Wedding Flowers A Fee: \$75.00 Prerequisite: Hort 335 (or concurrent enrollment). Provides the first year student with an understanding of the requirements for wedding and event designing. Basic bouquet construction, consultation. (Winter)	(2.0:2:0)

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<p>HORT 338B Wedding Flowers B (2.0:2:0) Fee: \$75.00 Prerequisite: Hort 338A Provides the second year student with training in advanced bouquet construction, leadership, teambuilding, and management of event planning. (Winter)</p>	<p>HORT 420 Advanced Propagation (3.0:2:3) Fee: \$40.00 Advanced study of the principles, techniques, and applications of plant propagation with emphasis on tissue culture and micropropagation.</p>
<p>HORT 338C Wedding Flowers C (2.0:2:0) Fee: \$75.00 Prerequisite: Hort 338B Provides the third year student with training in freestyle bouquet design, group designing for events, supervisory leadership. (Winter)</p>	<p>HORT 430 Advanced Landscape Design (3.0:3:1) Fee: \$10.00 Prerequisite: Hort 321, 322, and 340 Artistic and functional design of landscapes. (Winter)</p>
<p>HORT 338R Wedding Flowers (1.0-3.0:1:0) Prerequisite: Hort 335 (or concurrent enrollment). Theories, methods and materials involved in wedding and special occasion arrangements in preparation for the Spring Flower and Bridal Open House. To prepare floral majors for opportunities to plan and design floral products for weddings. (Winter)</p>	<p>HORT 435 Advanced Floral Design (3.0:2:2) Fee: \$700.00 Prerequisite: Hort 335, 298B Professional floral design with emphasis on retail flower shop operation, products, and materials. Particular attention is given to developing speed, proficiency, and quality after students have completed a floral internship experience. (Winter)</p>
<p>HORT 339R Floral Portfolio (1.0:1:1) Fee: \$30.00 Prerequisite: Hort 335 or concurrent enrollment. Hort majors only. Floral Portfolio is a course to help students develop a personal portfolio of their floral design skills. Student are taught to evaluate their skills, document them with digital photography, and present them to potential employers. (Winter)</p>	<p>HORT 436 Competitive Design and Commentation (1.0:1:1) Fee: \$30.00 Prerequisite: Hort 336, 337, 338, 435, FDM major. Developing freestyle and structured designs from various materials for competitive designing and judging. (Winter)</p>
<p>HORT 340 Landscape Computer Operations (2.0:1:2) Fee: \$10.00 Prerequisite: Hort 230 Application of specific computer software programs that are commonly used in the horticulture industry; including sprinkler design, landscape design, bidding and estimating, GPS, and the internet. (Winter)</p>	<p>HORT 437 Interpretive Design (1.0:1:1) Fee: \$50.00 Prerequisite: Hort 336, 337, 338, 435, FDM major. Final evaluation of the student's ability to assess proper design interpretations, artistic dimensions of the student's preparation and training, fluency with the language of flowers, and product knowledge. (Winter)</p>
<p>HORT 350R ALCA Career Days (1.0:1:0) Fee: \$1000 This course for students selected to participate in the yearly ALCA Career Days field excursion with the Horticulture Department. The course is designed to assist students with their preparations to communicate with potential employers during the career day events. Students also are given special attention in perfecting practical skills that they have been taught throughout their tenure at the University.</p>	<p>HORT 453 Land Construction Material (3.0:2:2) Fee: \$10.00 Prerequisite: Hort 440 A study of the construction and design use of typical landscape construction materials including pavers, concrete, wood, and rock. (Winter)</p>
<p>HORT 351 Landscape Contracting (2.0:1:2) Fee: \$10.00 Prerequisite: Hort 230. Estimating, bidding, and contracting procedures for landscape construction, and maintenance projects. A hands-on approach to bidding and estimating jobs for the Green Industry. (Winter)</p>	<p>HORT 455 Nursery Management (2.0:1:2) Fee: \$100.00 Prerequisite: Hort 320 This course will focus on the development, organization, infrastructure, and operation of a production nursery. This will cover production principles and practices and strategies for wholesale and retail marketing of nursery crops. The laboratory will concentrate on the development of skills associated with the production and marketing of nursery crops. (Winter)</p>
<p>HORT 375 Floriculture Applications (1.0:1:0) Fee: \$10.00 Prerequisite: Hort 320 Case Studies of plant growth in relation to the floriculture industry with emphasis on the physiological interactions of plant growth resulting from fertilization, plant growth regulators, growing structures, irrigation and container media. (Fall, Spring)</p>	<p>HORT 460 Cut Flower Crops (2.0:1:2) Prerequisite: Hort 320 Commercial production, harvesting, marketing and scheduling of cut flower and crops. (Winter)</p>
<p>HORT 410 Turfgrass Management (3.0:2:3) Fee: \$40.00 Prerequisite: Concurrent enrollment in Hort 319. Establishment, culture, and maintenance of turf grass and trees in the landscape. (Alternating Semesters)</p>	<p>HORT 461 Potted Plants (2.0:1:2) Fee: \$1000 Prerequisite: Hort 320 Commercial production, harvesting, marketing, and scheduling of bedding plants and potted commercial crops. (Winter)</p>
<p>HORT 412 Landscape Pest Control (3.0:2:3) Fee: \$20.00 Identification and control of insects, weeds and diseases of ornamental plants. The use, limitation and methods of applying pesticides including laws concerning their use.</p>	<p>HORT 470 Landscaping with Vegetables and Fruit (2.0:1:2) Prerequisite: Hort 320 Principles and practical applications for fruit and vegetable establishment, culture, production, storage, and economics. (Winter)</p>