## Virginia High School Horticultural Production and Management

<u>Course Description</u>: This advanced course offers instruction in both the greenhouse production and landscape areas of horticulture. Units of study include plant identification, greenhouse management, growing greenhouse crops, landscape design, installation, and maintenance, horticulture mechanics, nursery management, and turf production. Agribusiness units will cover operating a horticultural business, pricing work, advertising, and sales. Participation in FFA student organization activities and Supervised Agricultural Experience (SAE) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Lesson	Hours/
AS- AgriScience (Central Core – Revised) AM- Agricultural Mechanics & Technology APS- Animal, Plant, & Soil Science ER- Environmental Resources	Problem Area
Instruction in the FFA Organization is to take place at appropriate times	10
throughout the year.	
Unit: B – Developing Leadership and Communication Skills	
Problem Area: 1 – Opportunities in FFA and Youth Organizations	
Lesson: AS B1-2 – Opportunities in the FFA	
Lesson: AS B1-3 – Achievement in FFA	
Lesson: AS B1-4 – Leading the FFA Chapter	
Problem Area: 3 – Developing Communication Skills	
Lesson: AS B3-4 – Effective Speaking Techniques	
Lesson: AS B3-8 – Written Communication	
Instruction in SAE programs is to take place at appropriate times throughout	10
the year.	
Unit: B – Developing Leadership and Communication Skills	
Problem Area: 1 – Understanding SAE's	
Lesson: AS B5-3 - Possible SAE Programs	
Lesson: AS B5-4 - Planning Your SAE Program	
Lesson: AS B5-5 - Implementing SAE Programs	
Lesson: AS B5-6 - Keeping and Using SAE Records	
Lesson: AS B5-7 - Long Range Plans for Expanding SAE Programs	
Note – Content in lessons from the Horticulture Cluster Unit A Problem Areas	20
1 through 5 should be reviewed (or taught for the first time) prior to teaching	
the following lessons.	
Unit: B – Floriculture	5
Problem Area: 1 - Greenhouse Structures	
Lesson: HO B1-1 – Exploring Greenhouse Structures	
Lesson: HO B1-2 – Controlling the Greenhouse Climate	
Lesson: HO B1-3 – Using Automated Systems in the Greenhouse	
Unit: B - Floriculture	15
Problem Area: 2 - Greenhouse Crop Production	
Lesson: HO B2-1 – Growing Poinsettias	
Lesson: HO B2-2 – Growing Potted Chrysanthemums	
Lesson: HO B2-3 – Growing Minor Potted Flowering Crops	
Lesson: HO B2-4 - Forcing Easter Lilies	
Lesson: HO B2-5 - Growing and Forcing Bulbs, Corms, and Tubers	
Lesson: HO B2-6 – Growing Foliage Plants	
Lesson: HO B2-7 – Growing Bedding Plants	

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Lesson: HO B2-8 – Growing Potted Perennials	
Lesson: HO B2-9 – Managing the Greenhouse Business	_
Unit: C - Nursery, Landscaping and Gardening	4
Problem Area: 4 – Interior Plantscaping	
Lesson: HO C4-1 – Installing Interior Plantscapes	
Lesson: HO C4-2 – Maintaining Interior Plantscapes	
Unit: C - Nursery, Landscaping and Gardening	8
Problem Area: 1 – Nursery Production	
Lesson: HO C1-1 - Understanding Nursery Production Facilities	
Lesson: HO C1-2 - Producing Nursery Crops	
Lesson: HO C1-3 - Packaging Nursery Crops	
Lesson: HO C1-4 - Managing the Nursery Business	
Unit: C - Nursery, Landscaping and Gardening	18
Problem Area: 2 - Residential Landscape Design	
Lesson: HO C2-1 - Analyzing the Residential Landscape	
Lesson: HO C2-2 - Designing the Landscape Areas	
Lesson: HO C2-3 - Beginning the Design Process	
Lesson: HO C2-4 - Applying the Principles of Art to the Landscape	
Lesson: HO C2-5 - Using Annuals and Perennials in the Landscape	
Lesson: HO C2-6 - Choosing Plants for the Landscape	
Lesson: HO C2-7 - Putting the Plan on Paper	
Lesson: HO C2-8 - Pricing the Landscape Plan	
Lesson: HO C2-9 - Managing the Landscape Business	
Unit: C - Nursery, Landscaping and Gardening	10
Problem Area: 7 – Using and Maintaining Tools and Equipment	
Lesson: HO C7-1 – Using Hand Tools	
Lesson: HO C7-2 – Using Power Tools and Small Landscape Maintenance	
Equipment	
Lesson: HO C7-3 – Identifying Large Landscape Maintenance Equipment	
Lesson: HO C7-4 – Maintaining Small Engines	
Unit: C - Nursery, Landscaping and Gardening	20
Problem Area: 3 - Landscape Installation	
Lesson: HO C3-1 - Preparing the Landscape Site	
Lesson: HO C3-2 - Installing and Maintaining Irrigation Systems	
Lesson: HO C3-3 - Installing Woody Landscape Plants, Ground Covers,	
Perennials, and Annuals	
Lesson: HO C3-4 - Installing Patios, Walks, and Decks	
Lesson: HO C3-5 - Installing Fences and Walls	
Lesson: HO C3-6 - Incorporating Lights in the Landscape	
Lesson: HO C3-7 - Incorporating Water Features in the Landscape	
Unit: C - Nursery, Landscaping and Gardening	10
Problem Area: 4 – Turfgrass Management	
Lesson: HO C4-1 – Identifying, Classifying, and Selecting Turfgrass	
Lesson: HO C4-2 – Establishing and Growing Turfgrass	
Lesson: HO C4-3 – Managing Turfgrass	
Lesson: HO C4-4 – Managing Pests in Turfgrass	
Lesson: HO C4-5 – Identifying Tools and Equipment Associated with Turfgrass	
Lesson: HO C4-6 – Identifying Tools and Equipment Associated with Tungrass  Lesson: HO C4-6 – Managing Athletic Fields and Golf Courses	
Lesson. The Office I wanaging Athletic Fields and Golf Courses	
Unit: C - Nursery, Landscaping and Gardening	6
Problem Area: 5 - Landscape Maintenance	0
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Lesson: HO C5-1 - Watering, Fertilizing, and Mulching Landscape Plants	
Lesson: HO C5-2 - Pruning Landscape Plants	
Lesson: HO C5-3 - Pricing Landscape Maintenance Work	
Unit: A – Horticulture Science	4
Problem Area: 6 - Hydroponics	
Lesson: HO A6-1 Understanding Hydroponics	
Lesson: HO A6-2 Growing Crops by Hydroponics	
Unit: C - Nursery, Landscaping and Gardening	12
Problem Area: 6 – Fruit and Vegetable Crop Production	
Lesson: HO C6-1 – Planning and Preparing a Vegetable Garden Site	
Lesson: HO C6-2 – Planting and Maintaining a Vegetable Garden	
Lesson: HO C6-3 – Producing Herbs and Vegetables	
Lesson: HO C6-4 – Growing and Maintaining Small Fruits	
Lesson: HO C6-5 – Producing Strawberries	
Lesson: HO C6-6 – Growing and Maintaining Tree Fruits	
Unit: E - Horticultural Business Management	4
Problem Area: 1 - Entrepreneurship in Horticulture	
Lesson: HO E1-1 - Establishing the Horticulture Business	
Lesson: HO E1-2 - Financial Management in the Horticulture Business	
Unit: E - Horticultural Business Management	14
Problem Area: 2 - Marketing Horticulture Products	
Lesson: HO E2-1 - Selecting a Marketing Approach	
Lesson: HO E2-2 - Developing a Marketing Plan	
Lesson: HO E2-3 - Advertising and Displaying Horticulture Products	
Lesson: HO E2-4 - Marketing Floral Crops	
Lesson: HO E2-5 – Marketing the Landscape Business	
Lesson: HO E2-6 - Selling Floral Orders	
Lesson: HO E2-7 – Selling Landscape Design and Construction Work	400
Total	180