

Horticulture Science & Principles of Floral Design YAG

Semester 1: Horticultural Science | Semester 2: Floral Design | 36 Weeks (4 Grading Periods)

TEKS Abbreviations: HORT = §127.54 Horticultural Science; FLOR = §127.53 Floral Design. Semester exams are cumulative. ACCESS may be used for career exploration, portfolios, employability skills, and extension activities.

GP	Wks	Unit & Focus	Major Learning Tasks & Assessments	Integrated TEKS	Extension Activities
1	1–2	Unit 1 – Horticulture Industry, Careers & Professional Standards	- Horticulture disciplines and Texas industry regions - Career/entrepreneurship research and education/certification plan - Workplace professionalism, safety, rights/responsibilities, citizenship - Intro SAE plan and record-keeping	- HORT1(A–E) - HORT2(A–B) - HORT4(A–E)	- ACCESS: career exploration and pathway research - FFA/CTSO leadership connection - Industry professional interview or virtual tour
1	3–5	Unit 2 – Plant Identification, Structure & Environmental Needs	- Common/scientific plant identification - Plant anatomy lab: roots, stems, leaves, flowers, fruit - Monocot/dicot comparison and pollination investigation - Light, water, nutrient needs; fertilizer-label analysis	- HORT5(A–F) - HORT6(A–D)	- Plant ID digital portfolio - Campus/greenhouse plant inventory - ACCESS: plant-science career connections
1	6–9	Unit 3 – Tools, Production Systems & Propagation	- Tool/equipment selection, safe use, and maintenance - Asexual propagation labs: cuttings, grafting, budding, layering/tissue culture demonstrations - Seed germination treatments - Compare soil-based media and soilless growing methods	- HORT6(E–G) - HORT7(A–E) - HORT1(B–C)	- Greenhouse production challenge - Propagation data log tied to SAE - Guest speaker: nursery/greenhouse professional
2	10–12	Unit 4 – Pest, Disease & Deficiency Management	- Identify pests, diseases, weeds, and nutrient deficiencies - Integrated pest management plan - Sanitation procedures - Chemical safety and pesticide-label interpretation	- HORT8(A–F) - HORT1(C)	- IPM case study - Greenhouse scouting log - Extension: compare biological, cultural, and chemical controls
2	13–17	Unit 5 – Landscape Design & Horticulture Business	- Site analysis using water, soil, light, climate, and USDA hardiness zones - Plant selection and landscape design using elements/principles - Sustainability: native plants, conservation, irrigation technology - Customer sales, pricing, marketing, budgeting, entrepreneurship - Update SAE/leadership documentation and portfolio	- HORT9(A–D) - HORT10(A–F) - HORT3(A–C) - HORT1(A–B,D–E)	- ACCESS: entrepreneurship and employability resources - Landscape proposal for a real/simulated client - Community beautification/service project
2	18	Semester 1 Exam – Horticultural Science	- Cumulative written/performance assessment - Plant identification, safety, propagation, pest management, landscape/business applications - Portfolio/SAE checkpoint	Cumulative: HORT1–10	Targeted review/remediation and enrichment
3	19–21	Unit 6 – Floral Industry, Careers, Safety & Floral History	- Career/entrepreneurship plan and industry certification research - Professionalism, workplace safety, employee/employer responsibilities, citizenship - Floral history and current industry practices - SAE and agricultural youth leadership documentation	- FLOR1(A–E) - FLOR2(A–B) - FLOR3(A–C) - FLOR4(A)	- ACCESS: career and certification exploration - FFA/CTSO leadership connection - Floral industry virtual tour

3	22–24	Unit 7 – Elements, Principles, Plant Materials & Floral Care	• Elements/principles and ancillary design concepts • Flower/foilage forms and functions • Identify/classify flowers, foliage, and plants • Processing, preservatives, temperature, cutting techniques, tools/chemicals • Indoor plant needs; pests/diseases and safe management	• FLOR4(B–E) • FLOR8(A–F) • FLOR10(A–B)	• Floral ID portfolio • Care-and-handling lab • Design critique using industry vocabulary
3	25–27	Unit 8 – Floral Arrangement Foundations & Contemporary Techniques	• Create/evaluate bud vase, round, symmetrical, and asymmetrical designs • Permanent botanical/homecoming mum design • Wiring and taping techniques • Safe tool use and specialty floral items • Peer critique and artistic justification	• FLOR5(A–B) • FLOR6(A–B,D) • FLOR7(A,C–D)	• Timed design challenge • Photo documentation for portfolio • Cost comparison of fresh vs. permanent botanicals
4	28–31	Unit 9 – Wearables, Holidays, Weddings, Sympathy & Specialty Design	• Corsages and boutonnieres • Holiday and cultural occasion designs • Wedding and sympathy design applications • Specialty designs and interiorscapes • Evaluate personal and peer designs; portfolio development	• FLOR5(C–E) • FLOR6(A–D) • FLOR7(A–B)	• Mock wedding/event design • Community/seasonal floral project • ACCESS: portfolio and communication extensions
4	32–35	Unit 10 – Floral Shop Operations, Event Planning & Business Management	• Cost-effective design and recipe costing • Pricing strategies and order processing • Packaging, distribution, delivery, setup logistics • Client consultation and event plan • Final floral portfolio/showcase and SAE/leadership update	• FLOR9(A–C) • FLOR1(A–B,D–E) • FLOR2(A–B) • FLOR3(A–C) • FLOR6(C)	• Operate a simulated floral shop • Client order/design challenge • ACCESS: employability, entrepreneurship, and portfolio tools
4	36	Semester 2 Exam – Floral Design	• Cumulative written/performance assessment • Design production, critique, care/handling, safety, business applications • Final portfolio/showcase	• Cumulative: FLOR1–10	• Targeted review/remediation and enrichment

TEKS Coverage Checklist

Semester 1 – Horticultural Science

Strand	Student Expectations	YAG Placement	Coverage
HORT1	HORT1(A-E)	Units 1, 3, 5	100% – all listed expectations
HORT2	HORT2(A-B)	Unit 1	100% – all listed expectations
HORT3	HORT3(A-C)	Unit 5	100% – all listed expectations
HORT4	HORT4(A-E)	Unit 1	100% – all listed expectations
HORT5	HORT5(A-F)	Unit 2	100% – all listed expectations
HORT6	HORT6(A-G)	Units 2–3	100% – all listed expectations
HORT7	HORT7(A-E)	Unit 3	100% – all listed expectations
HORT8	HORT8(A-F)	Unit 4	100% – all listed expectations
HORT9	HORT9(A-D)	Unit 5	100% – all listed expectations
HORT10	HORT10(A-F)	Unit 5	100% – all listed expectations

Semester 2 – Floral Design

Strand	Student Expectations	YAG Placement	Coverage
FLOR1	FLOR1(A-E)	Units 6, 10	100% – all listed expectations
FLOR2	FLOR2(A-B)	Units 6, 10	100% – all listed expectations
FLOR3	FLOR3(A-C)	Units 6, 10	100% – all listed expectations
FLOR4	FLOR4(A-E)	Units 6–7	100% – all listed expectations
FLOR5	FLOR5(A-E)	Units 8–9	100% – all listed expectations
FLOR6	FLOR6(A-D)	Units 8–10	100% – all listed expectations
FLOR7	FLOR7(A-D)	Units 8–9	100% – all listed expectations
FLOR8	FLOR8(A-F)	Unit 7	100% – all listed expectations
FLOR9	FLOR9(A-C)	Unit 10	100% – all listed expectations
FLOR10	FLOR10(A-B)	Unit 7	100% – all listed expectations