

Practicum in Agriculture, Food, and Natural Resources – Horticulture YAG

Horticulture-Focused Capstone | Two Credits | 36 Weeks (4 Grading Periods)

TEKS Abbreviation: PAFNR = \$127.86 Practicum in Agriculture, Food, and Natural Resources. The statewide practicum TEKS are industry-neutral within AFNR; this YAG applies them through horticulture-focused work-based learning, greenhouse/nursery operations, landscape and plant production, floral/retail horticulture, and related career experiences. Semester exams are cumulative. ACCESS may support career, employability, financial literacy, and portfolio activities.

GP	Weeks	Unit & Focus	Major Learning Tasks & Assessments	Integrated TEKS	Extension Activities
1	1–2	Unit 1 – Practicum Orientation, Workplace Safety & Professional Standards	- Practicum placement/lab orientation and individualized horticulture occupational objective - Policies, procedures, punctuality, time management, initiative, cooperation, ethics, professional appearance, PPE, laws and safety - Horticulture hazard analysis: chemicals, tools, greenhouse/landscape conditions - Baseline supervisor/teacher employability assessment	- PAFNR1(A–H) - PAFNR8(B,D)	- ACCESS: employability/career resources - OSHA-style horticulture safety audit - Industry mentor orientation
1	3–5	Unit 2 – SAE, Training Plan & Horticulture Career Development	- Plan/propose horticulture SAE/practicum experience and establish record-keeping system - Develop individualized training plan and technical competency goals - Evaluate strengths/weaknesses in horticulture technical skills - Research horticulture licensure/certification and career pathways	- PAFNR2(A–B) - PAFNR8(A–C,G)	- ACCESS: career/certification research - FFA/CTSO SAE documentation - Professional association exploration
1	6–9	Unit 3 – Horticulture Operations: Tools, Equipment & Resource Management	- Safe operation of horticulture tools/equipment tied to placement - Preventive maintenance and inventory systems - Analyze costs of supplies, tools, equipment, structures, plant material and growing inputs - Apply technical skills in greenhouse, nursery, landscape, floral/retail, or plant-production setting - Document competencies and work samples	- PAFNR8(A,D–F) - PAFNR4(C) - PAFNR9(A)(i),(vii)	- Greenhouse/nursery operations project - Equipment maintenance log - Cost-of-production comparison
2	10–12	Unit 4 – Horticulture Problem Solving & Data-Driven Decisions	- Identify authentic workplace/production problem - Generate and compare practical solutions - Collect/analyze data to guide operational decisions - Possible applications: irrigation, fertility, propagation success, pest pressure, inventory loss, plant quality, labor efficiency - Present recommendation to supervisor/teacher	- PAFNR4(A–C) - PAFNR6(A–C,F)	- IPM/production case study - Greenhouse data dashboard - Continuous-improvement project
2	13–15	Unit 5 – Leadership, Teamwork & Workplace Relationships	- Analyze effective leadership characteristics - Team building, consensus, continuous improvement, adaptability and conflict resolution - Shared responsibility for horticulture production/service tasks - Build effective working relationships and demonstrate respect - Participate in agricultural youth leadership and local program activities	- PAFNR3(A–C) - PAFNR5(A–E)	- FFA/CTSO leadership or service project - Team production challenge - Community horticulture project
2	16–17	Unit 6 – Professional Communication in Horticulture	- Use horticulture terminology and technical information accurately - Practice supervisor, coworker, vendor and customer communication - Interpret labels, manuals, work orders, plant-care resources and technical materials - Active listening and verbal/nonverbal communication - Produce workplace writing and oral presentation	- PAFNR6(A–F) - PAFNR1(C)	- Customer consultation simulation - Plant-care/instruction sheet - Professional email and work-order practice
2	18	Semester 1 Exam & Practicum Midyear Review	- Cumulative employability/technical assessment - Supervisor evaluation and conference	Cumulative: PAFNR1–6; PAFNR8;	Targeted skill remediation/enrichment

			• SAE/record-book audit • Midyear portfolio and training-plan update	PAFNR9(A)	
3	19–22	Unit 7 – Horticulture Business & Personal Financial Literacy	• Develop personal budget based on financial goals • Interpret pay stubs and reconcile bank statements • Maintain pay, bank and tax records • Credit, credit scores and identity-theft prevention • Model completion of personal income tax form • Connect personal finance to horticulture employment/entrepreneurship	• PAFNR7(A–G)	• ACCESS: financial literacy tools • Horticulture wage/budget scenario • Small-business cash-flow connection
3	23–27	Unit 8 – Advanced Horticulture Technical Skill Application	• Perform advanced technical skills aligned to occupational objective • Potential pathways: propagation/production, greenhouse climate/irrigation, plant nutrition, IPM, nursery/retail operations, landscape installation/maintenance, floral/event support • Apply safety, maintenance, costing and operational decision-making • Gather evidence of technical competency and certification preparation • Supervisor feedback and self-evaluation	• PAFNR8(A–G) • PAFNR1(A–H) • PAFNR4(A–C) • PAFNR9(A)(i–ii),(vii–viii)	• Industry certification preparation • Advanced greenhouse/landscape project • Job-shadow/mentor experience
4	28–31	Unit 9 – Horticulture Project Leadership & Community/Industry Engagement	• Lead a team-based horticulture production, landscape, floral/retail, or community project • Use project scheduling, communication, teamwork and problem solving • Participate in leadership/community service/professional activities • Document experience for portfolio • Evaluate project outcomes using operational data and stakeholder feedback	• PAFNR3(A–C) • PAFNR4(A–C) • PAFNR5(A–E) • PAFNR6(A–F) • PAFNR9(A)(iv),(vii)	• Campus beautification or community project • Plant sale/event operations • Industry partner project
4	32–35	Unit 10 – Career Launch & Professional Horticulture Portfolio	• Finalize technical competency evidence and credential documentation • Include recognitions, awards, scholarships/recommendations and extended learning • Write practicum experience summary and professional resume • Include work samples and supervisor evaluation • Conduct mock interview and present professional portfolio to stakeholders • Finalize SAE records and career next-step plan	• PAFNR2(A–B) • PAFNR8(C,G) • PAFNR9(A)(i–viii), (B)	• ACCESS: resume/interview/portfolio tools • Industry stakeholder portfolio panel • Certification/college/employment next-step plan
4	36	Semester 2 Exam & Final Practicum Showcase	• Cumulative written/performance assessment • Final supervisor evaluation • SAE and documentation audit • Professional portfolio presentation and practicum reflection	• Cumulative: PAFNR1–9	• Stakeholder showcase and recognition

Practicum in AFNR – Horticulture TEKS Coverage Checklist

Verification note: The checklist below covers every student expectation in §127.86. Horticulture is the local occupational focus; the TEKS themselves remain the statewide Practicum in Agriculture, Food, and Natural Resources standards.

Strand	Student Expectations	YAG Placement	Coverage
PAFNR1	A–H	Units 1, 8; reinforced throughout	100%
PAFNR2	A–B	Units 2, 10	100%
PAFNR3	A–C	Units 5, 9	100%
PAFNR4	A–C	Units 4, 8, 9	100%
PAFNR5	A–E	Units 5, 9	100%
PAFNR6	A–F	Units 4, 6, 9	100%
PAFNR7	A–G	Unit 7	100%
PAFNR8	A–G	Units 1–3, 8, 10	100%
PAFNR9	A(i–viii), B	Units 3, 8–10	100%

Horticulture Practicum Implementation Framework

- Practicum experiences may be paid or unpaid and may occur through employment, independent study, internships, assistantships, mentorships, or laboratories. Horticulture placements can include greenhouse/nursery operations, landscape businesses, garden centers, floral/retail operations, plant production, municipal/campus horticulture, or related enterprises.
- Because this is a capstone course, technical work should be individualized to each student's occupational objective and documented through the training plan, SAE records, supervisor feedback, work samples, and final portfolio.
- Technical horticulture activities in this YAG are applications used to teach the §127.86 practicum TEKS; they are not presented as additional state-required Practicum TEKS.