

Floriculture CDE

(February 2025)



Purpose

The National FFA Floriculture Career Development Event is designed to create an interest in career preparation for all current and future aspects of the floriculture industry through leadership development and hands-on technical skill development using industry standards that are delivered through the agricultural education curriculum.

Floriculture is a discipline of horticulture concerned with the cultivation of flowering and ornamental plants for gardens and the floral industry.

The floriculture industry encompasses the following areas:

- Greenhouse and field production and management.
- Garden center and floral shop management.
- Floral design and management.

Objectives

- Identify plants, plant materials, supplies and equipment utilized in the floriculture industry.
- Demonstrate an understanding of the biological and scientific principles of plant growth and development. Develop the skills underlying propagation, variety development, growth requirements, growing techniques, harvesting, marketing and maintenance of established floriculture plants.
- Identify and recommend solutions for plant disorders.
- Demonstrate the use of elements and principles of design and develop related skills.
- Evaluate marketable floral products for quality and cultural perfection for use in the retail floral industry.
- Identify, select, operate and maintain appropriate supplies and equipment for floriculture production, design and marketing.
- Demonstrate the use of safety procedures and practices in floriculture operations.
- Understand the operation, management and maintenance of facilities for floriculture operations.
- Demonstrate interpersonal skills necessary for successful employment in the floriculture industry.
- Demonstrate proper sales and customer service skills.
- Demonstrate general business practices appropriate to the floriculture industry.
- Effectively work together as a team.

Event Rules

Each team will be comprised of four members.

- All four scores will be used to determine the total team score.
- It is highly recommended that participants wear FFA Official Dress for this event. Participants may also bring an apron and/or a tool belt and towels. • Under no circumstances will any participant be allowed to touch or handle plant material during the event except when instructed by the event staff. • Any communication between participants during the event will be sufficient cause to eliminate the team from the event. The exception to this is the team activity.
- Any participant caught cheating during the event will be expelled from the event.
- The event superintendent will assign the participants to group leaders who will escort them to various event staging sites. Participants must know their participant number and stay in their assigned group at all times or until told to change leaders by the event superintendent.
- Any assistance given to a participant from any source during the event, other than a floriculture official, will be sufficient cause to eliminate the team from the event.
- All participants will be given an identification number by which they will be designated throughout the event.
- Various computer applications may be utilized throughout the floriculture event.
- Any participant in possession of an electronic and/or communication device in the event area is subject to disqualification.

Event Format

MATERIALS STUDENTS NEED TO PROVIDE:

- Clean clipboard, free of notes.
- Two sharpened No. 2 pencils.
- Floral cutters/clippers.
- Ribbon shears.
- Wire cutters.
- Calculator — Should be battery operated, non-programmable and non-scientific (basic five function only). No other calculators can be used during the event.
- All references to time limits are approximate. The committee reserves the right to adjust to the practicum and anticipated skill of the students

INDIVIDUAL ACTIVITIES

Identification of plant materials and equipment (200 points)

Fifty specimens from the floriculture plant and equipment identification list will be displayed for participants to identify by technical and common names. A number will designate each specimen. Four points will be awarded for each specimen that is correctly identified. Each participant will be allowed 25 minutes to complete this phase of the event.

General Knowledge Examination (200 points)

Participants will answer 50 multiple choice questions to test all areas of the floriculture industry as reflected in the event objectives including flowers and material from the wholesaler and how they are handled, stored, and used in the flower shop; knowledge of floral design (arrangement) and marketing of floral products from the floral shop as well as participants' knowledge and understanding of basic biological and scientific principles of producing and marketing flowers, plants and foliage. Each participant will be allowed 50 minutes to complete the exam. Each answer has a value of four points.

Test questions will come from the last five years of available National Floriculture CDE Tests. Each year the latest test will be added and the oldest test removed from the pool of questions to be used. National exams can be accessed at FFA.org

Problem-Solving/Decision-Making (200 points)

Each participant will solve 10 problems related to the various aspects of the floriculture industry identified in the event objectives. Each problem will describe the situation or create the problem and list four possible solutions to the problem. The participant must decide on the best possible solution to the problem. All materials and information necessary to solve the problem will be available to the participant as he or she solves the problem. Each participant will be allowed 50 minutes to complete this phase of the event. Each correct solution has a value of 20 points.

Annual Practicums (200 points)-Each participant will complete **two** annual practicums:Floral arrangement & Growing procedures

Floral Arrangement (100 points)

Make a \$55 retail priced floral arrangement in compliance with the scenario provided. (The \$55 cost will include tax as well as retail markup for fresh and hard goods and be within fifty cents either way of the \$55.) The event superintendent will announce the type of arrangement during the team orientation meeting. Using the materials provided, participants will be allowed 20 minutes to complete their arrangements and itemized bills. The event assistant at the beginning of the practicum will provide participants with the retail price of the flowers and foliage that they will use in their arrangements. The participant will determine the total arrangement cost using the pricing form provided plus 20% labor on their design. Retail cost of flowers and foliage given to the participant will be determined after polling florists to determine their current retail prices on the flowers and foliage used in the event. Scoring criteria are presented on the Floral Arrangement Practicum scorecard, which will be recorded by a judge.

EXPLANATION OF FLORAL ARRANGEMENT TERMS

Design: Category interpretation: design follows objective/scenario given

Balance: Physical and visual

Creativity: Artistic inventiveness

Depth: Placement of materials at different levels throughout the arrangement

Focal Emphasis: Design has one area of design that attracts the eye to it

Line: Movement

Mechanics: Professional techniques and application

Scale: Proportion

Unity: Cohesiveness of design

Color: harmonious use of color

Growing Procedures (100 points)

One of the three activities listed below will be demonstrated on an annual basis. Ten minutes will be allowed for this section including questions from the judges. Seven (7) minutes to complete the assigned task, 1 minute for judges' questions, and 2 minutes for judges scoring.

POTTING OF YOUNG PLANTS (PLUGS OR LINERS)- Participants will be asked to plant young plants in the pots provided. Each participant will be given a group of young plants from which to select their transplants from; an appropriate pot or pots; potting medium; and ID stake and a marking pencil. Scoring criteria are presented on the Potting of Young Plants Practicum Rubric, which will be recorded by a judge.

ASEXUAL PROPAGATION OF PLANTS- Each participant will be provided the parent plant materials and all other materials needed to propagate plants asexually. Using the available materials, participants will take cuttings from the plant before them and stick them in the correct media, best for rooting. Participants should sanitize all equipment and use it appropriately in a safe manner. Scoring criteria are presented on the Asexual Plant Propagation Rubric, which will be recorded by a judge.

PINCHING PLANTS - A plant will be placed before each participant. Participants will be judged on the procedures they follow in pinching the plant in compliance with the scenario provided. Scoring criteria are presented on the Pinching Plants Rubric, which will be recorded by a judge.

Rotational Practicums (75 Points)

In addition to the **two** annual practicums, **ONE** practicum will be selected from the list below for each noted year.

MAKE AND PACKAGE A CORSAGE (75 POINTS)

Each participant will make and package a \$25 retail priced corsage including 20% labor. The type of corsage and information about the corsage will be provided to the participants through a given scenario at the beginning of the practicum by the event assistant in charge. All plant and non-plant materials needed to construct and package the corsage will be provided. The selection of materials should be combined to create a floral display according to the acceptable retail purposes, using appropriate elements and principles of design. Each participant will be allowed 20 minutes to complete the construction of the corsage and complete an itemized listing of costs for the corsage constructed. Scoring criteria are presented on the Making and Packing a Corsage Rubric, which will be recorded by a judge.

❖ IDENTIFYING AND CONTROLLING PLANT DISORDERS (75 POINTS)

Pest and disorder items may be presented as an intact specimen, photograph or preserved specimen (herbarium sheet, insect mount, etc.). Each specimen will be designated by a station number. The participant must identify the item and its classification (nutritional/environmental, insect/pest or disease). The participant must then determine the damage location as well as chemical and culture controls for the disorder. Each participant will identify 15 specimens total for this event.

No specimens or items may be touched or handled in any way. Fifteen (15) minutes will be allowed for this event. Refer to the Disorder Practicum Scorecard for additional details.

The plant disorders will come from the following list of disorders.

Nutritional and environmental Disorder

- Cold temperature (freeze)
- Cold water damage
- Ethylene damage
- Iron deficiency
- Insufficient water damage
- Nitrogen deficiency
- Phosphorus deficiency

Diseases

- Botrytis – Gray mold
- Damping-off
- Downy mildew
- Leaf spot (Black)
- Powdery mildew
- Root rot
- Rust
- Stem rot
- Tospovirus (INSV and TSWV)

Insects and Pests

- Aphids
- Fungus gnats
- Leaf miner
- Leafhopper
- Mealybugs
- Scale
- Shore flies
- Snails/Slugs
- Spider mites
- Thrips
- Whiteflies

- ❖ **HANDLING A HAZARDOUS SITUATION (75 POINTS)** Each participant will be presented with a hazardous situation that could develop in a floriculture business. The participant will be asked to explain how to resolve the problem. The participant will be evaluated on their understanding of the problem and procedures and practices followed in resolving the problem. Ten minutes will be allowed for this practicum. Scoring criteria are presented on the Hazardous Situation Rubric, which will be recorded by a judge.

Scoring

Phase	Individual Points	Team Points
Plant and Equipment Identification	200	800
General knowledge	200	800
Problem solving	200	800
Annual practicums - 100 points each * Floral arrangement * Growing procedures	200	800
Rotational practicums – 1 selected * Make and Package a Corsage * Identifying/Controlling Plant Disorders * Handling a Hazardous Situation	75	300
TOTAL	875	3,500

TIEBREAKERS

Individual

If ties occur, the following events will be used in the listed order to determine award recipients:

1. Written exam
2. Floral arrangement practicum

Team

If ties occur, the following events will be used in the listed order to determine award recipients:

1. Plant and equipment identification
2. Total score for Floral Arrangement Practicum

Awards

Awards will be presented at an awards ceremony to individuals and/or teams based upon their rankings.

Floriculture Plant Identification List

No.	Botanical Name	Common Name
101	Aechmea fasciata cv.	Bromeliad
102	Ageratum houstonianum	Floss Flower
103	Alocasia amazonica	Amazon elephant ear
104	Aloe vera	Aloe plant
105	Alstroemeria hybrid cv.	Peruvian Lily
106	Anemone coronaria	Wind Flower
107	Anethum graveolens cv.	Dill
108	Angelonia hybrid cv.	Angelonia
109	Anthurium x andraeanum cv.	Flamingo Plant
110	Antirrhinum majus cv.	Snapdragon
111	Aphelandra squarrosa cv.	Zebra Plant
112	Araucaria heterophylla	Norfolk Island Pine
113	Asparagus densiflorus	Fox Tail Fern
114	Aster Amellus	Aster
115	Astilbe hybrid cv.	Astilbe
116	Begonia x semperflorens – cultorum	Wax Begonia
117	Begonia x tuberhybrida cv.	Tuberous Begonia
118	Caladium x hortulanum cv.	Caladium
119	Calathea insignis	Rattlesnake plant
120	Calibrachoa hybrid cv.	Million Bells
121	Callistephus chinensis cv.	China Aster
122	Campanula hybrid cv.	Bell Flower
123	Canna x generalis cv.	Canna
124	Capsicum annuum	Ornamental Pepper
125	Celosia argentea cv.	Cockscomb
126	Centaurea cyanus	Cornflower, Bachelor's Button
127	Chamaedorea elegans	Parlor Palm
128	Chamelaucium uncinatum	Waxflower
129	Cholorophytum comosum cv.	Spider Plant
130	Chrysanthemum x morifolium	Chrysanthemum
131	Clematis hybrid cv.	Clematis
132	Codiaeum variegatum pictum	Croton
133	Colocasia esculenta	Taro
134	Cordyline fruticosa	Ti Plant
135	Crassula argentea	Jade Plant

165	Hemerocallis cv.	Daylily
166	Hibiscus spp.	Hibiscus
167	Hippeastrum hybrid cv.	Amaryllis
168	Hosta cv.	Hosta Plantain Lily
169	Hoya carnosa	Wax Plant
170	Hyacinthus orientalis cv.	Hyacinth
171	Hydrangea macrophylla	Big Leaf Hydrangea
172	Hypoestes phyllostachya	Polka-Dot plant
173	Impatiens hawkeri	New Guinea Impatiens
174	Impomoea batatas cv.	Sweet potato vine
175	Iris x xiphium cv.	Dutch Iris
176	Justica brandegeana	Shrimp Plant
177	Kalanchoe x blossfeldiana cv.	Kalanchoe
178	Leucanthemum x superbum	Shasta Daisy
179	Liatris spicata	Blazing stars
180	Lilium hybrid cv.	Asiatic or Oriental Lily
181	Limonium sinuatum	Statice
182	Lobularia maritima	Alyssum
183	Mandevilla spp.	Rock Trumpet
184	Maranta leuconeura	Prayer Plant
185	Matthiola incana cv.	Stock
186	Monstera deliciosa	Split Leaf Philodendron
187	Narcissus hybrid cv.	Daffodil or Narcissus
188	Nephrolepis exaltata cv.	Boston Fern
189	Ocimum basilicum cv.	Basil
190	Opuntia cv.	Cactus
191	Paeonia cv.	Peony
192	Paphiopedilum hybrid cv.	Ladyslipper Orchid
193	Pelargonium peltatum cv.	Ivy Geranium
194	Pelargonium x hortorum cv.	Zonal Geranium
195	Pentas hybrid cv.	Pentas star flower
196	Peperomia sp.	Peperomia
197	Petroselinum crispum cv.	Parsley
198	Petunia x hybrida cv.	Petunia
199	Phalaenopsis cv.	Moth Orchid
200	Philodendron scandens oxycardium	Heartleaf Philodendron

136	<i>Cycas revoluta</i> cv.	Sago Palm
137	<i>Cyclamen x persicum</i> cv.	Cyclamen
138	<i>Cymbidium</i> cv.	Cymbidium Orchid
139	<i>Cymbopogon</i> cv.	Lemongrass (herb)
140	<i>Dahlia</i> hybrid cv.	Dahlia
141	<i>Delosperma</i>	Ice Plant
142	<i>Delphinium consolida</i> cv.	Larkspur
143	<i>Dendrobium</i> cv.	Dendrobium Orchid
144	<i>Dianthus caryophyllus</i> cv.	Carnation
145	<i>Dracaena Marginata</i>	Red Edge Dracaena
146	<i>Echinocactus</i> cv.	Barrel Cactus
147	<i>Epipremnum aureum</i> cv.	Golden Pothos
148	<i>Erica carnea</i> cv.	Winter Heath
		Silver Dollar
149	<i>Eucalyptus polyanthemos</i>	Eucalyptus
150	<i>Euphorbia pulcherrima</i> cv.	Poinsettia
		Lisianthus Prairie gentian
151	<i>Eustoma grandiflorum</i>	
152	<i>Exacum affine</i>	Persian Violet
153	<i>Ficus benamina</i> cv	Benjamin Fig
154	<i>Ficus elastica</i> cv	Rubber Plant
155	<i>Ficus lyrata</i>	Fiddle Leaf Fig
156	<i>Fragaria x ananassa</i> cv.	Strawberry Plant
157	<i>Freesia x hybrida</i>	Freesia
158	<i>Gardenia jasminoides</i>	Gardenia
159	<i>Gerbera jamesonii</i>	Gerbera Daisy
160	<i>Gladiolus x hortulanus</i> cv.	Gladiolus
161	<i>Gomphrena</i> hybrid cv.	Globe Amaranths
162	<i>Gypsophila elegans</i> cv.	Baby's Breath
163	<i>Hedera helix</i> cv.	English Ivy
164	<i>Helianthus annuus</i>	Sunflower

201	<i>Pilea cadierei</i>	Aluminum Plant
202	<i>Portulaca oleracea</i> cv.	Portulaca/ Moss rose
203	<i>Primula malacoides</i> cv.	Primrose
204	<i>Protea</i> sp.	Protea
		Ranunculus/ Buttercups
205	<i>Ranunculus</i> hybrid cv.	
206	<i>Rhododendron simsii</i> cv.	Azalea
207	<i>Rumohra adiantiformis</i>	Leatherleaf Fern
208	<i>Saintpaulia ionantha</i> cv.	African Violet
209	<i>Salvia splendens</i> cv.	Salvia
210	<i>Sansevieria trifasciata</i> cv.	Snake Plant
211	<i>Schefflera arboricola</i>	Dwarf Schefflera
212	<i>Schlumbergera bridgesii</i>	Christmas Cactus
213	<i>Sempervivum</i> hybrid cv.	Hens and Chicks
214	<i>Senecio cineraria</i>	Dusty Miller
215	<i>Senecio rowleyanus</i>	String of Pearls
	<i>Solenostemon</i>	
216	<i>scutellarioides</i>	Coleus
217	<i>Solidago</i> hybrid cv	Solidago
218	<i>Spathiphyllum</i>	Peace Lily
219	<i>Stephanotis floribunda</i>	Stephanotis
220	<i>Strelitzia reginae</i>	Bird of Paradise
221	<i>Syngonium podophyllum</i>	Arrowhead plant
222	<i>Tagetes species</i> cv.	Marigold
223	<i>Tillandsia</i> spp.	Air Plant
224	<i>Tradescantia zebrine</i>	Inch Plant
225	<i>Tulipa</i> cv.	Tulip
226	<i>Verbena</i> hybrid cv.	Verbena
227	<i>Viola x wittrockiana</i> cv.	Pansy
228	<i>Zantedeschia</i> hybrid cv.	Calla Lily
229	<i>Zinnia</i> cv.	Zinnia

Floriculture Tool Identification List

No.	Item		
301	#100 Ribbon (satin, sheer, wired)	350	Impulse sprinkler
302	#3 Ribbon (satin, sheer, wired)	351	Drip Irrigation tape
303	#40 Ribbon (satin, sheer, wired)	352	Irrigation timer
304	#9 Ribbon (satin, sheer, wired)	353	Mist nozzle (mist bed)
305	18-Gauge floral wire	354	Nosegay holder
306	28-Gauge floral wire	355	Nursery container
307	Anvil-and-blade pruner	356	Oscillating sprinkler
308	Backflow preventer	357	Peat moss
309	Bouquet sleeve	358	Peat pots
310	Bulb planter	359	Pest strips
311	Cardette	360	pH testing meter
312	Cell pack containers	361	Polyethylene film
313	Ceramic container	362	Polyethylene pipe
314	Chemical resistant gloves	363	Pot covers
315	Chenille stem	364	Propagation mat
316	Coconut coir	365	Propagation trays
317	Compressed air sprayer	366	PVC (polyvinyl chloride) pipe
318	Corsage box	367	PVC pipe cutter
319	Corsage pin	368	Resin-coated fertilizer
320	Corsage snips	369	Respirator
321	Drip emitter, irrigation	370	Ribbon shears
322	Dry foam	371	Rice hulls
323	Dust mask	372	Rockwool propagation cubes
324	Duster	373	Rose and stem flower stripper
325	Ellepot propagation cubes	374	Safety goggles
326	Enclosure card	375	Sand
327	Fern greening pins	376	Scoop shovel
328	Fertilizer injectors	377	Shade fabric
329	Floral adhesive	378	Sharpening stone
330	Floral foam	379	Sheet moss
331	Floral knife	380	Siphon injector
332	Floral preservative	381	Soil moisture meter
333	Floral stem tape	382	Solenoid valve
334	Fogger	383	Spaghetti tubing (1/4" diameter or less)
335	Gas mask	384	Spanish moss
336	Glass vase	385	Sphagnum moss
337	Glue gun	386	Spray suit
338	Glue pan	387	Square point (flat) shovel
339	Glue sticks	388	Styrofoam
340	Granular fertilizer	389	Surestik cling
341	Greenhouse thermostat	390	Tulle
342	Hanging basket	391	Vermiculite
343	Hearing protection	392	Water breaker
344	Hook-and-blade pruners (bypass pruners)	393	Water picks
345	Hose punch	394	Water soluble fertilizer
346	Hose repair coupling	395	Water tubes
		396	Waterproof container tape

347 Hose-end repair fitting
 348 Hose-end sprayer
 349 Hose-end washer

397 Wire cutter
 398 Wooden pick
 399 Wrist corsage holder

Floral Arrangement Practicum Rubric(100 POINTS)

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

	Excellent 4-5 points	Good 2-3 points	Needs Improvement 0-1 points	Member Score
Category interpretation	Design follows given scenario within provided parameters and correlates to the appropriate style, shape and design	Design slightly followed given scenario but is somewhat lacking in appropriate style, shape, or design	Design does not follow given scenario and/or lacks in following the given style, shape, or design	
Balance	7-10 points Design is both visually and physically balanced	4-6 points Design is slightly off balanced	0-3 points Design is not balanced visually or physically	
Creativity	7-10 points Design expresses advanced creative ability and advanced design techniques	4-6 points Design expresses some creative ability and minimal advanced design techniques	0-3 points Design lacks creative ability and Demonstrates limited design techniques	
Depth	7-10 points Placement of materials at different levels is evenly distributed throughout	4-6 points Placement of materials are somewhat distributed evenly	0-3 points Placement of items are not distributed evenly	
Color	7-10 points Color is used evenly/harmoniously throughout	4-6 points Color is used somewhat correctly	0-3 points Color is not used correctly	
Focal emphasis	7-10 points Design has one area of design that attracts the eye	4-6 points Design somewhat has a clear focal point	0-3 points Design does not have a clear focal point	
Line/Rhythm	7-10 points Design has a clear sense of movement created visually by the placement of floral materials	4-6 points Design has a somewhat clear sense of movement created visually by the placement of floral materials	0-3 points Design has no clear sense of movement created visually by the placement of floral materials	
Mechanics	7-10 points Techniques used to keep floral material secure and stable are hidden or done neatly	4-6 points Techniques used to keep floral material secure and stable are somewhat hidden or done neatly	0-3 points Techniques used to keep floral material secure and stable are not hidden or done neatly	
Scale / Proportion	4-5 points Design is the correct size based on container given	2-3 points Design is slightly out of proportion	0-3 points Design is not in proportion with container given	
Unity	4-5 points All principles of designs are present and executed well	2-3 points Some principles of design are executed well	0-1 points None or few principles of design are executed well	
Itemized list of costs (15 pts)				
Bill of Sale Completion	4-5 point Bill of Sale is completed entirely a complete list of all items used	2-3 points Bill of Sale is not entirely complete or missing some items used in the design	0-1 points Bill of Sale is missing a lot of detail and/or missing several items used in the design	
Individual Pricing and Quantity Used	4-5 points All items used in the design are individual price and quantity totally accurate	2-3 points Some items added incorrectly, or quantity used listed incorrectly.	0-1 points Significant number of items added or listed incorrectly	

Name	Member Number	Chapter/State	Team Number
Floral Arrangement Itemized List of Costs			Date
Evaluator Name	Member's Signature		

Quantity	Flower/Foliage	Unit Cost	Total
TOTAL FLOWER/FOLIAGE MATERIAL COST			
Quantity	Material Used	Unit Cost	Total
TOTAL HARD GOODS COST			

Total Plant Material Cost	
Total Hardgood Cost	
Sub Total	
Labor 20%	
Total Arrangement Cost	

Asexual Plant Propagation Rubric (100 POINTS)

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

	Excellent	Good	Needs Improvement	Weight	Member Score
Proper sanitation and equipment use	4–5 points Thoroughly covering cutting instrument with a sterile solution	2–3 points Cleaning cutting instrument with solution	0–1 point No sanitation procedures followed or not followed properly	(X2)	
Selection of cuttings	4–5 points Small uniform terminal shoot cuttings	2–3 points Used some cuttings of the same size and type	0–1 point Too large nonterminal shoots, or not uniform in size	(X2)	
Making cuttings	5–6 points Straight, flush even cut of the basal end	3–4 points Some cuttings cut properly and some incorrectly cut	0–2 points basal end cut at angle or damaged	(X2)	
Preparation of cuttings for sticking in growing media	5–6 points Selected/ prepared cuttings that did not require further preparation	3–4 points Selected cuttings that required removal of damaged and/or unneeded foliage	0–2 points left damaged and/or unnecessary foliage on plant	(X2)	
Use of rooting hormone	4–5 points Poured correct amount of rooting hormone into separate container, applied Hormone & tapped off excess amount	2–3 points Too much or too little put in separate container, applied correctly but did not tap off extra hormone	0–1 point applied directly from source container and/or did not use rooting hormone	(X2)	
Selection of growing media	5–6 points Select best rooting medium for optimum rooting	3–4 points Select moderate but not best choice for optimum rooting	0–2 points selected incorrect rooting medium	(X2)	
Sticking of cuttings in growing media	5–6 points Creating a dibble in media prior to placing cutting, placing at proper depth, firming media correctly	3–4 points Correctly demonstrated at least 1 or 2 of the correct principles	0–2 points no prior hole made, planted too deep, or left unstable	(X2)	
Cuttings labeled correctly	4–5 points Labeled with date propagated, plant name, and cultivar	2–3 points Labeled with some but not all information required	0–1 point no label present or labeled with incorrect information	(X2)	

Response to questions	5–6 points Answered judges questions correctly	3–4 points Answered some questions correctly	0–2 points Did not or incorrectly answered questions	(X2)	
TOTAL SCORE (100 POINTS POSSIBLE)					

Pinching Plant Rubric (100 POINTS)

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

	Excellent 8-10 points	Good 4-7 points	Needs Improvement 0-3 points	Weight	Member Score
Selection of plant part to pinch	Followed given scenario to determine correct pinch	Some pinches were made in incorrect places on plant	Most all pinches were made on incorrect places	(X2)	
Use of proper procedures in making pinches	Used proper tools and/or techniques in making pinches	Used some but not all proper tools and/or techniques in making pinches	Used few or not any of proper tools and/or techniques in making pinches	(X2)	
Made proper pinches	Plant pinched correctly to get desired effect per instructions	Some pinches were too little or too much to get desired effect per instructions	Most or all of plant pinches would not allow the plant to reach desired effect per instructions	(X2)	
Overall effect of making pinches	The plant will reach desired outcome after pinching, no damage to plant parts left after pinch, and pinches correctly done	The plant will have some difficulty achieving desired outcome, some plant parts left have damage, and some pinches not done correctly	The plant will not be able to achieve desired outcome, much damage to plant part left, and most pinches not done correctly	(X2)	
Answered questions correctly	Answered questions correctly	Answered some questions correctly	Did not or incorrectly answered questions	(X2)	

Potting of Young Plants Practicum Rubric (100 POINTS)

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

	Excellent	Good	Needs Improvement	Weight	Member Score
Selection of plugs or liners	5-6 points Plugs/liners are uniform in size and shape, correct number selected based on pot size provided	3-4 points Plugs/liners are somewhat uniform in size and shape, just slightly off in selecting the correct number	0-2 points Plugs/liners are not uniform in size and shape, correct number not selected based on pot size provided	(x2)	
Proper planting depth	5-6 points Hole is made prior to placing plant in soil, the entire root system is covered, leaving proper stem length visible	3-6 points minor amount of roots are showing, planted slightly too deep	0-2 points A large amount of roots are showing or plant stem is covered with soil	(x2)	
Labeling of plant/pot	5-6 points Labeled with date planted, plant name, and cultivar	3-4 points Labeled with some but not all information required	0-2 points no label present or labeled with incorrect information	(x2)	
Correct growing medium level in pot	5-6 points Growing media is filled to the inner lip of the pot, leaving enough room to water the plant	3-4 points Growing media is filled slightly too high or too low	0-2 points Growing media is left very low or completely fills up the pot	(x2)	
Plug or liner arrangement and angle	5-6 points Plugs/Liners evenly spaced for pot size given and plugs/liners planted in upright position	3-4 points plugs/liners planted slightly too close or too far apart, planting slightly tilting	0-2 points Plugs/liners not spaced correctly and not planted upright	(x2)	
Firmness of growing medium	5-6 points After planting, growing media is tapped/pressed firmly around each plant leaving the plant upright	3-4 points Growing media is left slightly loose or left slightly too firm restricting plant growth	0-2 points Growing media is not firmed after planting or left entirely too firm restricting plant growth	(x2)	
General appearance (free from handling damage)	5-6 points Final product presented to the judge with plants upright, pot clean, and in sellable condition	3-4 points Final product presented to the judge in slightly sellable condition	0-2 points Final product presented to judge in non-sellable condition	(x2)	

Response to questions	5–6 points Answered questions correctly	3–4 points Answered some questions correctly	0–2 points Did not or incorrectly answered questions	(x2)	
TOTAL SCORE (100 POINTS POSSIBLE)					

Making and Packaging a Corsage Rubric **(75 POINTS)**

Name	Member Number	Chapter/State	Team Number
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Evaluator Name	Evaluator's Signature	Date
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	Excellent	Good	Needs Improvement	Weight	Member Score
Mechanical Application	11–15 points Techniques used to keep floral material secure and stable are hidden or done neatly	6–10 points Techniques used to keep floral material secure and stable are somewhat hidden or done neatly	0–5 points Techniques used to keep floral material secure and stable are not hidden or done neatly	(x2)	
Color	7–10 points Color is used evenly/harmoniously throughout	4–6 points Color is used somewhat correctly	0–3 points Color is not used correctly	(x2)	
Creativity	11–15 points Design expresses a high level of creative ability and advanced design techniques.	6–10 points Design expresses some creative ability and minimal advanced design techniques	0–3 points Design lacks creative ability and demonstrated limited design techniques	(x2)	
Balance	7–10 points Design is physically and visually balanced	4–6 points Design is slightly off balance	0–3 points Design does not follow the principles of design regarding balance	(x2)	
Design & Category Interpretation	4–5 points Design follows scenario given for an overall cohesive design	2–3 points Design somewhat follows scenario given and overall design is somewhat cohesive	0–1 points Design does not follow given scenario	(x2)	
Bill of Sale Completion	7–10 points Bill of Sale is completed entirely with a complete list of all items used	5–8 points Bill of Sale is not entirely complete or missing some items used in the design	0–4 points Bill of Sale is missing a lot of detail and/or missing several items used in the design	(x2)	

Pricing Accuracy (accuracy of pricing identification)	7-10 points		4-6 points		0-3 points		(x2)	
	All items used in the design are listed with correct price, totally accurately, labor calculated corrected, within		Some items added incorrectly and/or final price slightly off target goal of \$25.00		Significant number of items added incorrectly or way off target goal of \$25.00.			

Quantity		Flower/Foliage		Unit Cost	Total	
				TOTAL FLOWER/FOLIAGE MATERIAL COST		

Quantity		Material Used		Unit Cost	Total	
				TOTAL HARD GOODS COST		

	50 cents up or down of \$25.00			
TOTAL SCORE (75 POINTS POSSIBLE)				

Corsage Itemized List of Costs

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

Hazardous Situation Rubric (75 POINTS)

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

	Excellent 4-5 points	Good 2-3 points	Needs Improvement 0-1 points	Weight	Member Score
Utilize proper personal safety precautions	Was able to identify /demonstrate all proper PPE.	Missed only 1 piece of PPE	Did not know or excluded much of the PPE	X 4	
Utilize proper safety procedures in clearing up the situation	All necessary safety hazards including appropriate handling of materials and equipment discussed	Most necessary safety hazards including appropriate handling of materials and equipment discussed	Safety hazards and handling considerations not addressed	X 5	
Proper disposal of problem materials	Understood and demonstrated the procedures for disposal of the contaminant.	Understood and demonstrated most of the necessary procedures for disposal	Disposal procedures lacked completeness	X 4	
Utilize proper follow-up procedures	Provided follow-up procedures for contaminant and to address prevention.	Provided some follow-up procedures for contaminant and some to address prevention.	Follow up procedures and prevention were missing	Total Plant Material Cost	
				Total Hardgood Cost	
				Sub Total	
				Labor 20%	
				Total Arrangement Cost	

Total score (75 points possible)	
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Disorder Practicum Scorecard (75 points)

Name	Member Number	Chapter/State	Team Number
Evaluator Name	Evaluator's Signature	Date	

		Member Answer	Possible Points	Member Score
1.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
2.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
3.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
4.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
5.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
6.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
7.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
8.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	

		Member Answer	Possible Points	Member Score
9.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
10.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
11.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
12.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
13.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
14.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
15.	Classification #:		1	
	Identification #:		2	
	Chemical Control #:		1	
	Cultural/Biological Control #:		1	
TOTAL POINTS			75	

CLASSIFICATION

- 1 Diseases
- 2 Insects/Pests /Mites
- 3 Nutritional/Environmental

IDENTIFICATION

- 01 Aphids
- 02 Black Leaf Spot
- 03 Botrytis – Grey Mold
- 04 Cold Temperature (freeze)
- 05 Cold Water Damage
- 06 Damping-off
- 07 Downy Mildew
- 08 Ethylene Damage
- 09 Fungus Gnats
- 10 Insufficient Watering
- 11 Iron Deficiency
- 12 Leaf Miner
- 13 Leafhopper
- 14 Mealybugs
- 15 Nitrogen Deficiency
- 16 Phosphorus Deficiency
- 17 Powdery Mildew
- 18 Root Rot
- 19 Rust
- 20 Scale
- 21 Shore Flies
- 22 Snails/ Slugs
- 23 Spider Mites
- 24 Stem Rot
- 25 Thrips
- 26 Tospovirus (INSV and TSWV)
- 27 Whiteflies

CHEMICAL CONTROL

- 1 Fungicide
- 2 Insecticide
- 3 Miticide
- 4 Mulluscicide
- 5 No Treatment Listed

CULTURAL CONTROL

- 1 Apply Complete Fertilizer
- 2 Correct/Adjust Temperature
- 3 Correct/Adjust Watering
- 4 Ladybird Beetles
- 5 Nematodes
- 6 Parasitic Wasps
- 7 Predatory Mites
- 8 Reduce Relative Humidity
- 9 No Treatment Listed

National FFA Organization | Career and Leadership Development Events **for West Virginia**

Awards

Awards will be presented at an awards ceremony to individuals and/or teams based upon their rankings.

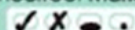
References

This list of references is not intended to be all-inclusive.

- Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.
- National FFA— Past CDE Q&A's, <https://www.ffa.org/resources/cde/questions-and-answers>
- Principal of Floral Design, Pat Diehl Scafe, James M. DelPrince – Goodheart Wilcox Publisher. www.g-w.com
- The AIFD Guide to Floral Design: Terms, Techniques, and Traditions – The American Institute of Floral Design.
- Introduction to Horticulture Science and Technology. 5th edition, 2015. Schroeder, Seagle Felton, Ruter, Inter- state Publishers, Inc.
- Introductory Horticulture. Carroll Shry, Edward Reiley. Eighth Edition.
- Greenhouse Operation and Management. Paul V. Nelson. Seventh Edition. (Specific reference for the disorders rotational practicum)
- Ball Publishing: Ball Redbook, Volume 1&2, 18th Edition.
- FFA Resume Generator©, resumegenerator.FFA.org

**HORTICULTURE****CDE# 105482**

Incorrect Marks Correct Mark



Team Name

This sheet is for demonstration and practice only. You must use a real scan sheet for actual competition.

Team Number

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Code

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

State	Last Name	First Name
A	A	A
B	B	B
C	C	C
D	D	D
E	E	E
F	F	F
G	G	G
H	H	H
I	I	I
J	J	J
K	K	K
L	L	L
M	M	M
N	N	N
O	O	O
P	P	P
Q	Q	Q
R	R	R
S	S	S
T	T	T
U	U	U
V	V	V
W	W	W
X	X	X
Y	Y	Y
Z	Z	Z

Placing Classes

Place	1234	Class									Place	1234	
		1	2	3	4	5	6	7	8	9			
1	1234											1234	1
2	1243											1243	2
3	1324											1324	3
4	1342											1342	4
5	1423											1423	5
6	1432											1432	6
7	2134											2134	7
8	2143											2143	8
9	2314											2314	9
10	2341											2341	10
11	2413											2413	11
12	2431											2431	12
13	3124											3124	13
14	3142											3142	14
15	3214											3214	15
16	3241											3241	16
17	3412											3412	17
18	3421											3421	18
19	4123											4123	19
20	4132											4132	20
21	4213											4213	21
22	4231											4231	22
23	4312											4312	23
24	4321											4321	24

Team Activity

Team	Ind.
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

Proficiency (Judges)

1	2	3	4	5	6
0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

Assessment and Solution

1	A B C D	6	A B C D	11	A B C D	16	A B C D	21	A B C D
2	A B C D	7	A B C D	12	A B C D	17	A B C D	22	A B C D
3	A B C D	8	A B C D	13	A B C D	18	A B C D	23	A B C D
4	A B C D	9	A B C D	14	A B C D	19	A B C D	24	A B C D
5	A B C D	10	A B C D	15	A B C D	20	A B C D	25	A B C D

Exam

1	A B C D	26	A B C D
2	A B C D	27	A B C D
3	A B C D	28	A B C D
4	A B C D	29	A B C D
5	A B C D	30	A B C D
6	A B C D	31	A B C D
7	A B C D	32	A B C D
8	A B C D	33	A B C D
9	A B C D	34	A B C D
10	A B C D	35	A B C D
11	A B C D	36	A B C D
12	A B C D	37	A B C D
13	A B C D	38	A B C D
14	A B C D	39	A B C D
15	A B C D	40	A B C D
16	A B C D	41	A B C D
17	A B C D	42	A B C D
18	A B C D	43	A B C D
19	A B C D	44	A B C D
20	A B C D	45	A B C D
21	A B C D	46	A B C D
22	A B C D	47	A B C D
23	A B C D	48	A B C D
24	A B C D	49	A B C D
25	A B C D	50	A B C D

Exam 2/Team

1	A B C D
2	A B C D
3	A B C D
4	A B C D
5	A B C D
6	A B C D
7	A B C D
8	A B C D
9	A B C D
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11	A B C D
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18	A B C D
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20	A B C D
21	A B C D
22	A B C D
23	A B C D
24	A B C D
25	A B C D

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