

OHIO CAREER DEVELOPMENT EVENTS FLORICULTURE

Effective August 1, 2009.

Purpose:

The floriculture CDE is an educational activity designed as a practical method of teaching students to identify various horticulture plants, disorders, insects and diseases that affect the floriculture industry. The skills students learn in evaluating floriculture products provide opportunities for them to become better producers and consumers of these products. The written test and the practicum will truly test the student's ability to handle practical situations in the floriculture industry.

Date: Spring

Location: OSU/ATI

CDE Rules:

1. Each school may enter an unlimited number of dues paid FFA members as participants. The top 4 scores will be considered the "team", and the top 3 scores will be the team score of record.
2. Under no circumstances will any contestant be permitted to touch or handle plant materials being used for identification purposes.
3. Any communication between contestants during the CDE will disqualify the contestant(s) from the CDE.
4. No team, team member, or team coach shall visit the CDE facilities to observe plant materials within a week of the event date. Any group or individual reported and proven to be doing this will be disqualified from the competition.
5. Any contestant caught cheating during the CDE will be disqualified.
6. Contestants must bring clipboards and number 2 pencils.
7. No cell phones, pagers, walkie talkies or any other communication devices are allowed.
8. No programmable calculators are allowed.

CDE Format:

The CDE will consist of five phases:

1. **Plant Identification** – 35 total specimens. Students will:
 - Identify all 35 by common name only
 - Identify 15 by scientific name
2. **Other Identification** – 50 specimens consisting of:
 - 20 insects, diseases and deficiencies
 - 25 supplies and equipment
 - 5 floral arrangements and corsages
3. **Written Test** – 50 questions Online Prior to the Event

4. **Placing Classes** – 5 classes

5. **Practicum** – 2 skills

Scoring Guide:

1. Individual:

Plant Identification	75 points
Other Identification	50 points
Written Test	50 points
Placing Classes	50 points
Practicums	70 points
Total Possible	295 total possible points

2. Team:

290 points x 3 individuals = **885 total possible points**

CDE COMPONENT DESCRIPTIONS

Part I – Plant Identification (75 points, 50 minutes)

35 specimens from the following list will be displayed for contestants to identify by common names. Contestants will also be responsible for identifying 15 of these specimens by their scientific names. The scorecard will be like the attached list of plant materials except the common names will be in alphabetical order.

Scientific names from the flowering pot plant and foliage pot plant sections of this guide will also be listed in alphabetical order. All plants, cut flowers, live and dried floral materials will be tested for and alphabetically on the scorecard.

Fresh Flowers

<u>Common</u>	<u>Scientific Name</u>
Acacia	<i>Acacia dealbata</i>
Yarrow	<i>Achillea filipendulina</i>
Monkshood	<i>Aconitum napellus</i>
Agapanthus	<i>Agapanthus africanus</i>
Allium	<i>Allium species</i>
Ginger	<i>Alpinia purpurata</i>
Alstroemeria	<i>Alstroemeria hybrids</i>
Queen Anne's Lace	<i>Ammi majus</i>
Anemone	<i>Anemone coronaria</i>
Anthurium Flower	<i>Anthurium andraeanum</i>
Snapdragon	<i>Antirrhinum majus</i>
Monte Casino Aster	<i>Aster ericoides</i>
Astilbe	<i>Astilbe hybrids</i>
Banksia	<i>Banksia prionotes</i>
Bouvardia	<i>Bouvardia species</i>
China Aster	<i>Callistephus chinensis</i>
Orchid Cattleya	<i>Cattleya species</i>
Cornflower	<i>Centaurea cyanus</i>
Waxflower	<i>Chamelaucium uncinatum</i>
Larkspur	<i>Consolida ambigua</i>
Lily of the Valley	<i>Convallaria majalis</i>
Orchid cymbidium	<i>Cymbidium species</i>
Delphinium	<i>Delphinium elatum</i>
Orchid dendrobium	<i>Dendrobium species</i>

Chrysanthemum Spray	<i>Dendranthemum x grandiflorum</i>
Chrysanthemum Standard	<i>Dedranthemum x grandiflorum</i>
Carnation	<i>Dianthus caryophyllus</i>
Carnation (miniature)	<i>Dianthus caryophyllus nana</i>
Heather	<i>Erica species</i>
Lisianthus	<i>Eustoma grandiflorum</i>
Forsythia	<i>Forsythia x intermedia</i>
Freesia	<i>Freesia hybrids</i>
Gardenia	<i>Gardenia augusta</i>
Gerbera	<i>Gerbera jamesonii</i>
Gladiolus	<i>Gladiolus hybrids</i>
Gladiolus Miniture	<i>Gladiolus x colvilli</i>
Gypsophila	<i>Gypsophila paniculata</i>
Sunflower	<i>Helianthus annuus</i>
Heliconia	<i>Heliconia species</i>
Hydrangea	<i>Hydrangea macrophylla</i>
Iris	<i>Iris hybrids</i>
Leptospermum	<i>Leptospermum species</i>
Pincushion Protea	<i>Leucospermum cordifolium</i>
Liatris	<i>Liatris spicata</i>
Lily Asiatic	<i>Lilium hybridum</i>
Lily Oriental	<i>Lilium hybridum</i>
Statice Caspia	<i>Limonium latifolium</i>
Statice Annual	<i>Limonium sinuatum</i>
Stock	<i>Matthiola incana</i>
Bells of Ireland	<i>Moluccella laevis</i>
Daffodil	<i>Narcissus pseudonarcissus</i>
Nerine Lily	<i>Nerine hybrids</i>
Oncidium Orchid	<i>Oncidium hybrids</i>
Star of Bethlehem	<i>Ornithogalum thyrsoides</i>
Orchid Phalaenopsis	<i>Phalaenopsis hybrids</i>
Pink Mink Protea	<i>Protea neriifolia</i>
Ranunculus	<i>Ranunculus asiaticus</i>
Rose Sweetheart	<i>Rosa hybrids</i>
Rose Spray	<i>Rosa hybrids</i>
Rose Standard	<i>Rosa hybrids</i>
Solidago (Golden Aster)	<i>Solidago species</i>
Solidaster	<i>Solidaster hybrids</i>
Stephanotis	<i>Stephanotis floribunda</i>
Bird -of- Paradise	<i>Strelitzia reginae</i>
Lilac	<i>Syringa vulgaris</i>
Tulip	<i>Tulipa hybrids</i>
Calla Lily	<i>Zantedeschia species</i>

Fresh Cut Foliage

<u>Common</u>	<u>Scientific Name</u>
Silver Fir	<i>Abies alba</i>
Noble Fir	<i>Abies procera</i>
Sprenger Asparagus Fern	<i>Asparagus densiflorus 'Sprengeri'</i>
Tree Fern	<i>Asparagus pyramidalis</i>
Plumosus	<i>Asparagus setaceus</i>
Boxwood	<i>Buxus sempervirens</i>
Camellia Foliage	<i>Camellia japonica</i>
Cedar	<i>Cedrus species</i>
Emerald Palm	<i>Chamaedorea species</i>
Croton	<i>Codiaeum variegatum</i>
Hawaiian	<i>Cordyline terminalis</i>
Scotch Broom	<i>Cytisus scoparius</i>
Horsetail	<i>Equisetum hyemale</i>
Eucalyptus	<i>Eucalyptus species</i>
Salal	<i>Gaultheria shallon</i>

Galax	<i>Galax aphylla</i>
English Ivy	<i>Hedera helix</i>
Holly	<i>Ilex aquifolium</i>
Myrtle	<i>Myrtus communis</i>
Oregon Fern	<i>Nephrolepis exaltata</i>
White Pine	<i>Pinus strobes</i>
Pittosporum	<i>Pittosporumbira</i>
Leatherleaf, Bakerfern	<i>Rumohra adiantiformis</i>
Italian Ruscus, Smilax	<i>Ruscus Ruscus aculeatus</i>
Huckleberry, Huck	<i>Vaccinium ovatum</i>
Bear Grass	<i>Xerophyllum tenax</i>

Foliage Plants

<u>Common</u>	<u>Scientific Name</u>
Chinese Evergreen	<i>Aglaonema speices</i>
Norfolk Island Pine	<i>Araucaria heterophylla</i>
Parlor Palm	<i>Chamaedorea speices</i>
Spider Plant	<i>Chlorophytum comosum</i>
Grape ivy	<i>Cissus rhombifolia</i>
Croton	<i>Codiaeum variegatum</i>
Jade Plant	<i>Crassula argentea</i>
Dumbcane	<i>Dieffenbachia species</i>
Red Margined Dracaena	<i>Dracaena cincta</i>
Pothos	<i>Epipremnum aureum</i>
Weeping Fig	<i>Ficus benjamina</i>
Rubber Plant	<i>Ficus elastica</i>
Prayer Plant	<i>Maranta leuconeura erthroneura</i>
Boston Fern	<i>Nephrolepis exalta</i>
Baby Rubber Plant	<i>Peperomia obtusifolia</i>
Heart-leaf Philodendron	<i>Philodendron scandens oxycardium</i>
Aluminum Plant	<i>Pilea cadierei</i>
Snake Plant	<i>Sansevieria trifasciata</i>
Hawaiian Schefflera	<i>Schefflera arboricola</i>
Peace Lily	<i>Spahtiphyllum hybrids</i>
Arrowleaf (Nephtytis)	<i>Syngonium podophyllum</i>
Wandering Jew	<i>Tradescantia zebrine</i>

Flowering Potted Plants

<u>Common</u>	<u>Scientific Name</u>
Crocus	<i>Crocus species</i>
Cyclamen	<i>Cyclamen persicum</i>
Chrysanthemum	<i>Dendranthema X grandiflorum</i>
Poinsettia	<i>Euphorbia pulcherrima</i>
Persian Violet	<i>Exacum affine</i>
Amaryllis	<i>Hippeastrum hybrids</i>
Hyacinth	<i>Hyacinthus orientalis</i>
Hydrangea	<i>Hydrangea macrophylla</i>
Kalanchoe	<i>Kalanchoe blossfeldiana</i>
Easter Lily	<i>Lilium longiflorum</i>
Grape Hyacinth	<i>Muscari species</i>
Paper White Narcissus	<i>Narcissus tazetta</i>
Cineraria	<i>Pericallis hybrida</i>
English Primrose	<i>Primula vulgaris</i>
Azalea	<i>Rhododendron simsii hybrids</i>
African Violet	<i>Saintpaulia ionantha</i>
Holiday Cactus	<i>Schlumbergera truncate</i>
Gloxinia	<i>Sinningia speciosa</i>
Tulip	<i>Tulipa hybrids</i>

Bedding Plants

Ageratum
Calabracoa
Celosia
Coleus
Dusty miller
Fuschia
Geranium
Impatiens
Lobelia
Marigold
New Guinea Impatiens
Non-stop Begonia
Osteospermum
Pansy
Petunia
Petunia- Wave
Portulaca
Salvia
Snapdragon
Streptocarpis
Sweet Alyssum
Sweet Potato Vine
Verbena
Vinca- Flowering
Vinca- Trailing
Wax Begonia
Zinnia

Vegetables/Herbs

Basil
Cabbage
Onion
Oregano
Pepper
Thyme
Tomato

Part II – Other Identification (50 points, 50minutes)

50 specimens from the following list will be displayed for the contestants to identify by their common names.

Insects, Disease, & Deficiencies (15 items)

Insects

Aphid
Fungus Gnat
Mealybug
Two-spotted Spider Mite
Thrip
Whitefly
Scale

Diseases

Fungal leaf Spot
Bacterial leaf Spot
Bacterial Stem Rot
Botrytis
Damping Off
Powdery Mildew
Root Rot

Deficiencies

Iron Deficiency
Nitrogen Deficiency
Phosphorus Deficiency
Potassium Deficiency

Supplies and Equipment (30 items)

General Supplies

Bulb Planter
Cell Pack
Fertilizer Injector
Flat
Floral
Heating Cable
Mechanical Seeder
Perlite
Plug Tray
Preservative
Slow Release Fertilizer
Soilless Media
Spaghetti Tube
Sphagnum Peat Moss
Sprayer
Thermostat
Vermiculite
Water Breaker

Florist's Tools

Boutonniere Pin
Casket Saddle
Chenille Stem
Chicken Wire
Corsage Pin
Corsage Bag
Floral Foam
Floral Tape
Florist Knife
Florist Shears
Hyacinth Stake
Paddle Wire
Ribbon Shears
Steel Pick
Water Tube
Waterproof Tape
Waxed String
Wire Easel
Wired Wooden Pick
Wristlet

Dried Floral Material

Eucalyptus
German Statice
Lotus Pods
Raffia
Sheet Moss
Spanish Moss
Transparent Oak
Ting-tings
Wheat

Floral Design Containers

Bud Vase
Centerpiece Bowl
Compote
Ginger Vase
Rose Bowl

Greenhouse Containers

Azalea Pot
Bulb Pan
Hanging Basket
Standard Pot

Ribbon Sizes

#3
#9
#40

Wires

18 gauge
24 gauge
28 gauge

Floral Arrangements and

Corsages (5 items)

Cascading Bouquet
Circular Mound
Clutch Bouquet
Colonial Bouquet
Diagonal
Double End Corsage
Equilateral Triangle
Hogarth
Horizontal
Isosceles Triangle
Right Triangle
Vertical
Zig-zag

Part III – Written Exam (50 points, 45 minutes)

A written exam consisting of 25 true/false statements will administered to each contestant. Each question will be worth 1 point. Problem solving type questions may be incorporated into the exam.

Part IV – Placing Classes (50 points, 20 minutes)

Plants and flowers in each pot or container will be judged as a group and placed first, second, third, and fourth. Plants or flowers may not be touched or handled.

1. Cut flowers

Four containers from one or more of the following groups will be judged.

- Alstromeria
- Carnations
- Roses
- Spray Chrysanthemums

The following 100 point scale may be used as a basis for evaluation:

- Condition 25 (uniformity, freedom from bruise and blemish, substance)
- Form 20 (uniformity, immature or over mature, size and proportion)
- Stem and Foliage 20 (uniformity, strength and/ or straightness, foliage quality, size and proportion)
- Color 20 (uniformity, intensity)
- Size 15 (uniformity, deduct points in relation to development and condition-oversized or undersized)

2. Flowering Potted Plants

Four plants from one or more of the following groups will be judged:

- African Violet
- Chrysanthemum
- Geranium
- New Guinea Impatiens

The following 100 point scale may be used as a basis for Evaluation:

- Cultural Perfection 40
- Floriferousness (effect of floriferousness) 20
- Size of Plant 20
- Color of Bloom 10
- Size of Bloom 10

3. Foliage Plants.

Four plants from one or more of the following groups will be judged:

- Boston fern
- Dieffenbachia
- English Ivy
- Philodendron
- Spathiphyllum
- Schefflera

The following 100 point scale may be used as a basis for evaluation:

- Cultural Perfection (health and vigor) 35 points
- Size of Plant 35 points
- Form or Symmetry 30 points

4. Flower Arrangement

Four arrangements from one of the following classes will be judged:

- Circular mound
- Hogarth
- Horizontal
- L-shaped
- Scalene triangle
- Symmetrical triangle
- Vertical

The following 100 point scale may be used as a basis for evaluation:

- Design 50 (balance, proportion, emphasis, unity, harmony)
- Color 20
- Mechanics 15
- Condition 15

Part V – Practicum (65 points)

On the day of the event, the event director will select two of the following four practicums - in which all contestants will participate. The practicums to choose from include:

Planting rooted cuttings;

Decorating a potted plant;

Making a corsage; and

Making a bud vase

****Sample scorecards are located in the back of this guide.****

SUPPLIES TO BRING:

Each school will be responsible for providing a tool box equipped with enough floral shears, wire cutters, and knives for each contestant from the school. Tool boxes should be clearly identified with the school's name on the outside of the box, and should be presented at registration.

1. Planting Rooted Cuttings (35 points, 5 minutes)

Contestants will be given 10 rooted cuttings. They will select 5 cuttings to plant in a 6 1/2 inch azalea pot. Appropriate potting mix, label, and pencil are provided for each contestant to use in completing this task. The time limit is five minutes. The rooted cuttings will be evaluated as follows:

Items #1 through 6 = 5 points each

Item #7 = 3 points

= 33points total

1. Selection of uniform cuttings
2. Filling pot with soil to proper depth
3. Proper placement of cuttings
4. Planting to proper depth
5. Labeling of pot
6. Watering of potted cuttings
7. General appearance (freedom from handling damage).

2. Decorating a Potted Plant (35 points, 6 minutes)

The student will decorate a potted plant using materials found at the event site. A potted plant, florist wire, assorted wrapping materials, assorted ribbons, and wood picks will be provided. Upon arriving at the practicum site, the student will be given a "holiday" situation that they must decorate the plant for. A six minute time limit will be allotted for completion of this task. The finished product will be evaluated as follows:

- a. Remove all damaged or yellow foliage.
- b. Selection of wrapping materials should harmonize with the color of the blooms.
- c. Cut wrapping to proper length. Wrap should extend 4" to 6" beyond the rim of pot.
- d. Properly fold and press the wrap around the pot.
- e. Construct a bow that will harmonize with the color of the flowers and wrap.
- f. Width of the bow should be no wider than the width of the pot to be decorated.
- g. Bow is firmly wired to a wood pick.
- h. Select the most attractive side of the plant for placement of the bow (focal point).

3. Making a Corsage (35 points, 8 minutes)

In this phase of the event, the student will construct either a single or double flower corsage as per the instruction of the judge at the CDE site. When arriving at the practicum site, the student will find stems of flowers, foliage, floral tape, wire, ribbon, mist bottle, corsage pins, corsage bags and/or boxes, and accessories. Each school must provide their own floral shears and knife. An eight minute time limit will be allotted for completion of this task. The finished product will be evaluated as follows:

- a. Product is finished
- b. Design shape and style
- c. Harmony of materials
- d. Bow
- e. Mechanics
- f. Packaging
- g. Originality

4. Making a Bud Vase (35 Points, 7 min.)

In this phase of the event, the student will construct a bud vase with a bow, suitable for an office desk. When arriving at the practicum site, the student will find a bud vase, flowers, foliage, wire, ribbon and/or accessories. Each school must provide their own floral shears and cutting tool. A seven minute time limit will be allotted for completion of this task. The finished product will be evaluated as follows:

- a. Product is finished
- b. Design shape and style
- c. Harmony of materials
- d. Bow
- e. Mechanics
- f. Proportion
- g. Originality

References:

The following references are available from the Ohio Agricultural Education Curriculum Materials Service:

Books and Bulletins:

Anderson, G.A (1995). *Floral design and marketing*. Columbus, OH: Curriculum Materials Service.

Ball, V. (1997) *Ball red book* (16th ed.). Chicago, IL: Ball Publishing.

Griner, C.P. (2002). *Floriculture: Designing and merchandising* (2nd ed.). New York: Delmar Publishers.

McMahon, R. W. (2000). *Introduction to greenhouse production* (2nd ed.). Columbus, OH: Curriculum Materials Service.

Ohio Florists' Association (1999). *Tips on growing bedding plants* (3rd ed.). Columbus, OH.

Powell, C.C. & Lindquist, R.K. (1997) *Ball pest and disease manual* (2nd ed.). Chicago, IL: Ball Publishing.

Slides Series – CMS:

A General Health Guide for Indoor Plants- Slide Set only

Corsages and Boutonnieres – Slide Set and CD

Cut Florists Foliage and Branches- Slide Set and CD

Diagnosing Problems on Indoor Plants- Slide Set and CD

Floral Design – CD only

Fresh Cut Florists Flowers- Slide Set and CD

Managing Plant Health in the Greenhouse Foliage Plants

Wedding Bouquets- Slide Set and CD

Wedding Decorations- Slide Set and CD

Computer Software – CMS:

Selecting House Plants

Additional Books and Manuals:

Pi Alpha Xi National Honorary Society. *A manual for flower judging* (9th ed.). Copies available for \$7.00 from:

Dr. Terry Ferriss

Department of Plant and Earth Science

University of Wisconsin-River Falls

410 S. 3rd St.

River Falls, WI 54022

Boodley, J.W. & Newman, S. E. (2009) *The commercial greenhouse* (3rd. ed.). Kentucky: Delmar Cengage Learning.

Nelson, P.V. (). *Greenhouse operation and management* (6th ed.). New Jersey: Prentice Hall.

**PRACTICUM 1 – PLANTING ROOTED CUTTINGS
SCORECARD**

Contestant Number _____

Contestant Name _____

School _____

Selection of uniform cuttings _____/ 5

Filling pot with soil to proper depth _____/ 5

Proper placement of cuttings _____/ 5

Planting to proper depth _____/ 5

Labeling of pot _____/ 5

Watering of potted cutting _____/ 5

General appearance _____/ 3

TOTAL POINTS = _____ / 33

**PRACTICUM 2 – DECORATING A POTTED PLANT
SCORECARD**

Contestant Number _____

Contestant Name _____

School _____

Remove all damaged or yellow foliage _____/ 5

Selection of wrapping materials should harmonize with the color of the blooms. _____/ 5

Cut wrapping to proper length. Wrap should extend 4" to 6" beyond the rim of pot. _____/ 5

Properly fold and press the wrap around the pot. _____/ 5

Construct a bow that will harmonize with the color of the flowers and wrap. _____/ 4

Bow is firmly wired to a wood pick. _____/ 4

Select the most attractive side of the plant for placement of the bow (focal point). _____/ 4

Overall harmony and superior design _____/ 1

TOTAL POINTS = _____ / 33

**PRACTICUM 3 – MAKING A CORSAGE
SCORE CARD**

Contestant Number _____

Contestant Name _____

School _____

Product is finished _____/ 5

Design shape and style _____/ 5

Harmony of materials _____/ 5

Bow _____/ 5

Mechanics _____/ 5

Packaging _____/ 5

Originality _____/ 3

TOTAL POINTS = _____ / 33

**PRACTICUM 4 – MAKING A BUD VASE
SCORECARD**

Contestant Number _____

Contestant Name _____

School _____

Product is finished _____/ 5

Design shape and style _____/ 5

Harmony of materials _____/ 5

Bow _____/ 5

Mechanics _____/ 5

Proportion _____/ 5

Originality _____/ 3

TOTAL POINTS = _____ / 33