

FLORICULTURE

3 or 4 Member Team

I. Purpose

The purpose of the Floriculture Career Development Event (CDE) is to stimulate the study of, and interest in, the production and retailing of cut flowers, plants and foliage through the agricultural education curriculum. The event requires students to identify plant materials, tools, and pests common to the industry, demonstrate knowledge and understanding of scientific principles and management practices applied in the industry via a written exam, make observations, draw conclusions, and utilize higher order thinking skills in problem solving situations. This event has ties to the following agricultural science curriculum: TEKS 130.20, Floral Design, TEKS 130.23 Horticulture Science and TEKS 130.25 Practicum in Agriculture, Food and Natural Sciences.

II. EVENT FORMAT

A. Team Make-up

Three or four individuals per school form a team. All members will be scored, and the top three scores will count towards the team total.

B. Equipment

1. Team members must provide their own sharpened pencils for the event. A pencil sharpener may not be available in each event room.
2. Team members must provide their own compliant clipboard and/or clean folder with the following items: scan sheet, and/or copy of the scan sheet, optional Texas FFA CDE drop sheet, and/or 2 sheets of lined or unlined blank paper.
3. Team members may use their own battery-operated non-programmable calculators.
4. Team members are **not** permitted to share calculators between teammates or among any other contestants.
5. No allowance will be made for malfunctioning or inoperable calculators. Electrical outlets will not be available for charging batteries, etc.
6. The "Universal Form C" scan sheet will be used for this CDE.

C. Event Schedule

1. Each contestant shall complete the event in the time allotted:
 - a. The identification of plant materials/pests/diseases/tools must be completed in 60 minutes. The identification section will be divided into two (30 minute) rotations.
 - b. The problem solving section must be completed in 30 minutes.
 - c. The placing classes must be completed in 15 minutes. The contestants will be able to work within the placing classes at their own pace during the 15 minutes.
 - d. The keep/cull section must be completed in 15 minutes. The contestants will be able to work within the keep/cull sections at their own pace during the 15 minutes.
 - e. The written examination must be completed in 30 minutes.
2. Observers are not permitted in the event area while the event is in progress, but observers may be allowed in the area following the event.

3. Providers are encouraged to leave contest materials in place for one hour following the conclusion of the event to allow teachers and students adequate time for review.

D. Identification of Plants/Tools/Pests/Diseases (600 points)

1. 60 specimens will be selected from the 170 plants/tools/pests/diseases listed on the Texas FFA Floriculture list.
2. Specimens will be identified in two rotations, 25 plants and five pests/diseases/tools in each rotation, with 30 minutes to complete each rotation. All contestants will be allowed to work within the rotation, at their own pace. Contestants **cannot** return to a rotation, once it is timed out.
3. A plant specimen may consist of any part of the plant commonly utilized in the floriculture industry for plant identification. The plant must match the plant listed on the Texas FFA Floriculture CDE list.
4. Plants to be identified will be presented as intact, live specimens. Tools may be either intact items or high quality photographs. Pests and diseases may be presented as intact specimens, photographs or preserved specimens (herbarium sheet, insect mount). Photographs will be 8.5" x 11" in size.
5. ~~When a pest or disease must be presented with an affected plant, a "Pest/Disease" label will be with the item to designate identification of the problem rather than the plant. The Pest/Disease label will be placed as part of the number of the specific specimen.~~
6. Each contestant will be supplied with a list of the plants, pests, diseases and tools. Contest providers will distribute this list to the contestants at the start of the contest, to insure equal access to the information throughout the event.
7. Each specimen will be designated with a number. Students bubble in the appropriate number in the space next to the specimen's name on the scan sheet.
8. 10 points are given for each correctly identified specimen.
9. Under no circumstances is any contestant allowed to touch or handle the photos or specimen used as part of the event. Any infraction of this policy is sufficient cause to eliminate the individual from the **entire contest**.
10. ~~If live pests are used, a magnifying device will be provided. (Enough devices for multiple students to identify at the same time – 6 preferred)~~
11. ~~If live pests are used, there will only be one species of pest per ID. (Providers should ensure there are not multiple species on the same ID spot)~~

E. Placing Classes (150 points)

1. Contestants place three classes that are selected from the placing classes list.
2. All plants in a class will be from the same species or cultivar.
3. There will be classes from each of the following types:
 - a. 1 class of blooming container plants.
 - b. 1 class of foliage container plants.
 - c. 1 class of floral designs.
4. Classes will consist of four items per placing class.
5. Classes will be designated by number and class name.
6. 50 points are given for each correctly placed class.
7. Floral designs **will must** be labeled by type (symmetrical, asymmetrical,

round or horizontal / vertical line).

8. Blooming Potted Plant classes will consist of all 4 specimens of the same variety and color.
9. If quality plants from the suggested list of plants to be used in a placing class are not available, the provider may substitute plants/flowers from only those listed on the identification list.

F. Cut Flower Keep/Cull Classes (150 points)

1. One class each of line, form and mass flowers (eight specimens per class/ three classes total)
2. The guidelines will follow *A Manual for Flower Judging* (See reference section) in determining the keep/cull classes.
3. Contestants should designate the four best plant specimens from the eight specimens presented, using visual appraisal. Students are not permitted to handle any plant specimen.
4. Event officials will assign a point value to each one of the individual plant specimens, within the class, with the greatest number of points assigned to the most desirable specimen and the least points assigned to the least desirable specimen. If the student selects the best four plant specimens, within the provided class full credit will be given (50 points). The selection of less desirable plant specimens will reduce the points awarded within each keep/cull class.
5. Classes will only contain 1 specimen per container for the Keep/Cull section. Example (If roses are used as a class, each of the 8 vases will only contain 1 rose to evaluate).
6. If quality specimens from the suggested list of specimens to be used in a Keep/Cull class are not available, the provider may substitute plants/flowers (keeping within the same type, Mass, Line, Form) from only those listed on the identification list.

One class of cut line flowers which may include:

- *Antirrhinum majus* cv. - Snapdragon
- *Delphinium elatum* - Delphinium
- *Gladiolus x hortulanus* cv. - Gladiolus
- *Consolida ambigua* cv. Larkspur
- *Liatris spicata* - Liatris
- *Matthiola incana* - Stock
- *Moluccella laevis* cv. - Bells of Ireland

One class of cut form flowers which may include:

- *Anthurium andraeanum* - Anthurium
- Bulbous Flowers - Iris, Daffodil, Tulip
- *Zantedeschia aethiopica* - Calla
- *Gerbera jamesonii* cv. - Gerbera
- *Lilium* cv.
- *Helianthus annuus* cv. - Sunflower
- *Protea* cv. - Protea

One class of cut mass flowers which may include:

- Chrysanthemum morifolium cv. - Standard Type
- Dendranthema grandiflorum cv. - Spray Type
- Dianthus caryophyllus cv. - Standard carnation
- Rose cv. - Rose
- Eustoma grandiflorum - Lisianthus
- Alstroemeria aurantiaca – Alstroemeria

G. General Knowledge Examination (100 points)

1. Contestants will complete a 50 question multiple choice exam.
2. Questions will be taken from a data bank of questions located on the Texas FFA website.
3. Contestants are given 30 minutes to complete the examination
4. Two points are awarded for each question answered correctly.

H. Problem Solving (100 points)

1. This practicum is designed to evaluate participant's knowledge and ability related to floricultural practices in the industry and selection, care and handling of interior plants in various settings. The practicums will alternate as noted:

2017

- Pricing and Calculating a Bill of Materials; and
- Care and Handling of Cut Flowers ie. processing, conditioning, and storage

2018

- Pricing and Calculating a Bill of Materials including Marketing, Pricing and Sales; and
- Plant and Facility Safety

2019

- Pricing and Calculating a Bill of Materials for Weddings; and
- Creating Wedding Designs

2020

- Pricing and Calculating a Bill of Materials for Sympathy Flowers; and
- Creating Sympathy Designs

2021

- Pricing and Calculating Specialty Designs (ie. homecoming, holidays, corsages/boutonnieres); and
- Assessing Interiorscaping Plants

2022

- Pricing and Calculating a Bill of Materials; and
- Care and Handling of Cut Flowers ie. processing, conditioning, and storage

2023

- Pricing and Calculating a Bill of Materials including Marketing, Pricing and Sales; and
- Principles and Elements of Design

2024

- Pricing and Calculating a Bill of Materials for Weddings; and
- Creating Wedding Designs

2025

- Pricing and Calculating a Bill of Materials for Sympathy Flowers; and
- Creating Sympathy Designs

2026

- Pricing and Calculating Specialty Designs (ie. homecoming, holidays, corsages/boutonnieres); and
- Plant Structures and Functions

UPDATE: Due to the cancellation of Career Development Events in 2020, the above listed rotations have been suspended for 2021.

2021 Practicum:

- Pricing and Calculating a Bill of Materials for Sympathy Flowers; and
 - Creating Sympathy Designs
- Contestants will be provided a written scenario that they must assess to determine the correct answers.
 - Contestants will complete 10 multiple-choice questions.
 - Contestants are given 30 minutes to complete the problem solving.
 - 10 points are awarded for each question answered correctly.
 - No more than 5 of the 10 multiple choice questions will require calculations from the pricing and calculating section.
 - A formula chart will be provided as part of the practicum section. This formula chart will be designed and added as a resource in regards to pricing, rounding, and calculations.

III. SCORING

Identification of Plant Materials	600 points
Placing Classes	150 points
Cut Flower Keep/Cull Classes	150 points
General Knowledge Exam	100 points
Problem Solving	100 points
TOTAL INDIVIDUAL POINTS	1,100 points
TOTAL TEAM POINTS	3,300 points

IV. TIEBREAKERS

- Ties for team awards will be broken using the following criteria:
 - The team with the higher score in the identification section wins. If still tied:
 - The team with the higher score in the placing class of floral designs wins. If still tied:
 - The team with the higher score in the problem solving wins. If still tied:
 - The team with the highest alternate score wins. If still tied:
 - The team will be accompanied by their advisor and will meet with the contest officials who will conduct a coin toss to determine the higher

placing team.

- B. Ties for individual awards will be broken using the following criteria:
1. The individual with the higher score in the identification section wins. If still tied:
 2. The individual with the higher score in the placing class of floral designs wins. If still tied:
 3. The individual with the higher score in the problem solving wins. If still tied:
 4. The individual will be accompanied by their advisor and will meet with the contest officials who will conduct a coin toss to determine the higher placing individual.

V. REFERENCES

Available from IMS, CEV and other resources:

Printed materials

8942 Complete Set AgSc 362 – Horticultural Plant Production, IMS

8959 Complete Set AgSc 363 – Principles and Elements of Floral Design, IMS

8188 Complete Set AgSc 365 – Advanced Floral Design, IMS

Videos References

9531D Techniques in Flower Judging

9736 Competitive Flower Arranging

9841 Horticulture Plant Identification – Floral, CEV 9842 Horticulture Plant

Identification – Foliage, CEV 9844 Practice Horticultural Plant Identification, CEV

Computer Software

9430NC - Floriculture CDE Placing Classes, IMS

Keep/Cull Cut Flower References: (Not Available through IMS):

A Manual for Flower Judging. (11th Edition) Prepared by Pi Alpha Xi is available from: ASHS, 1018 Duke Street, Alexandria, VA 22314; phone: 703.836.4606; fax: 703.836.2024; email: pax@ashs.org; Cost is \$12 each plus shipping.

Problem solving resources:

~~Hunter, Norah T. *The Art of Floral Design*. Second edition (2000). Albany, New York: Delmar Publishers, Inc. www.agriscience.delmar.com~~

~~Scace, Pat Diehl, and James M. DelPrince. *Principles of Floral Design: An Illustrated Guide*. N.p.: n.p., n.d. Print.~~

~~<http://aggie-horticulture.tamu.edu/archives/parsons/publications/houseplant/houseplant.html>~~

~~Georgia Agriculture Curriculum Resource website:~~

~~<http://www.gaaged.org/page.aspx?ID=76>~~

1. Goodhart Wilcox 978-1-61960-889-4- Principles of Floral Design, Copyright

- 2015, Pat Diehl Scace and James M. DelPrince
2. Norah T. Hunter, The Art Floral Design, 3rd Edition, ISBN-13: 978-1418063030

Judging Resource:

1. Pi Alpha Xi Flower Judging Manual

Other Websites:

Interiorscape Plants Database

<http://aggie-horticulture.tamu.edu/databases/interiorscape>

National FFA website www.ffa.org

Texas FFA website (test bank questions) www.texasffa.org

Additional Information FLORICULTURE PLACING CLASSES

1) One class of blooming container plants, which may include:

- Kalanchoe blossfeldiana cv. – Kalanchoe
- Rhododendron cv. – Azalea
- Saintpaulia ionantha cv. – African violet
- Chrysanthemum x morifolium cv – Florist’s chrysanthemum
- Rosa cv.- Roses
- Begonia tuberhybrida cv. - Tuberous begonias
- Pelargonium x hortorum - Geraniums

2) One class of foliage container plants, which may include:

- Epipremnum aureum cv. – Golden pothos, devil’s ivy
- Ficus benjamina ‘Exotica’ – Benjamin fig, weeping fig
- Ficus elastica – Rubber tree
- Nephrolepis exaltata cv. – Boston fern
- Spathiphyllum spp. – Spathiphyllum, Peace lily
- Codiaeum variegatum cv - Croton
- Hedera helix cv - English ivy

3) One class of floral designs, which may include the following design styles:

- Symmetrical triangle
- Asymmetrical triangle
- Round
- Horizontal or Vertical Line