NURSERY/LANDSCAPE
3 or 4 Member Team

I. PURPOSE

The purpose of the Nursery/Landscape Career Development Event (CDE) is to encourage FFA members to explore the diversity of the "Green Industry", in terms of plant materials used, basic knowledge, skills and applications to the workplace through the agricultural education curriculum. The event requires students to identify plant materials and tools common to the industry, demonstrate knowledge and understanding of scientific principles and management practices applied in the industry via a written exam, and make observations, draw conclusions and make decisions in evaluating groups of plants and landscape designs. The event has ties to the following agricultural science curriculum: TEKS 130.21, Landscape design and Management; TEKS 130.23, Horticulture Science; TEKS 130.22, Turf grass Management and TEKS 130.25, Practicum in Agriculture, Food and Natural Resources.

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 must provide their own architect scale for the event.
4. Team members may use their own battery-operated non-programmable calculators.
5. Team members are **not** permitted to share calculators OR architect scale between teammates or among any other contestants.
6. No allowance will be made for malfunctioning or inoperable calculators. Electrical outlets will not be available for charging batteries, etc.
7. 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 Keep/Cull section must be completed in 30 minutes.
   d. 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 Section (600 points)

1. 60 specimens will be selected from the 170 plants, pest, diseases, disorders, weed and tool list as presented on the Texas FFA Nursery/Landscape Identification List.
2. Specimens will be identified in two rotations, 25 plants and five pests/diseases/disorders/weeds/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 nursery/landscape industry for plant identification. The plant must match the plant listed on the Texas FFA Nursery/Landscape Identification list.
4. Plants to identify will be presented as intact, live specimens. Tools may be either intact items or high quality photographs. Pest 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.
6. Each contestant will be supplied with a list of the plants, pests, diseases, disorders, weeds and tools. Contest providers will distribute this list to 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 official scan sheet.
8. 10 points are given for each correctly identified specimen.
9. Under no circumstances is any student 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**.

E. Problem Solving (100 points)

1. This practicum is designed to evaluate participants' ability to evaluate a landscape design, read a landscape drawing, measure and calculate materials needed to execute a landscape plan and evaluate factors that affect profitability of a landscape business. In addition, the contest provider will incorporate two to five questions related to the following topics:
    - 2017: Assess turf management practices and safety in the landscape workplace.
    - 2018: Interpret plant materials from the design.
    - 2019: Interpret landscape plant culture, including growth rates, sun and shade tolerance, soil requirements and proper plant spacing.
    - 2020: Interpret principles of design, including balance, unity, focal point and landscape plan graphics and mechanics.
    - 2021: Assess installation techniques for landscape plants.
2. Blank typing paper will be provided at the contest site for calculations.
3. Students will have 30 minutes to complete this section.
4. This section will consist of 10 multiple choice questions worth 10 points each.

F. Plant Keep/Cull Classes (200 points)

1. One class each of groundcovers/vines, shrubs, and annual or herbaceous plants (eight specimens per class/three classes total). A fourth keep/cull class will be selected by the contest provider from the keep/cull class listing, for a total of four keep/cull classes.
2. 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.
3. Event officials will assign a point value to each one of the individual plant specimens, 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 an individual 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. Contest providers will utilize the Nursery/Landscape keep/cull standards available on JudgingCard.com. A new table illustrating keep/cull point groupings will be available on Judgingcard.com

Groundcovers/vines, which may include:
Hedera helix cvs.- English ivy
Ipomoea batatas - Sweet potato vine
Juniperus horizontalis cvs. – Creeping juniper
Liriope muscari – Liriope, Lilyturf,
Lonicera japonica – Japanese honeysuckle
Trachelospermum asiaticum – Asiatic jasmine
Vinca spp. - Periwinkle
Shrubs, which may include:
Abelia x grandiflora – Glossy abelia
Buxus cvs. - Boxwood
Euonymus japonica cvs. – Japanese euonymus
Gardenia spp. – Gardenia
Ilex cvs. - Holly
Nandina cvs. – Heavenly bamboo
Pittosporum tobira – Pittosporum
Raphiolepis indica cvs. – Indian hawthorn
Annual or herbaceous plants, which may include:
Begonia semperflorens-cultorum cvs. - Begonia
Caladium x hortulanum cv. – Caladium
Coleus x hybridus – Coleus
Hemerocallis cvs. – Daylily
Petunia x hybrida – Petunia
Tagetes cvs. - Marigold
Viola x wittrockianna cvs. – Pansy
Zinnia cvs. - Zinnia

G. General Knowledge Examination (100 points

1. Contestants will complete a 50 multiple choice question exam. Questions will be taken from bank of questions located on the Texas FFA website.
2. Contestants will be given 30 minutes to complete the exam.
3. Two (2) points will be awarded per question.

III. SCORING

Identification Section	600
Problem Solving	100
Plant Keep/Cull Classes	200
Exam	100
TOTAL INDIVIDUAL POINTS POSSIBLE	**1,000**
TOTAL TEAM POINTS POSSIBLE	**3,000**

IV. TIEBREAKER

A. Ties for team awards will be broken as follows:
   1. The team with the highest score in the Identification section wins.
   2. If still tied, the team with the highest score in the Problem Solving section wins.
   3. If still tied, the team with the highest score on the Keep/Cull section wins.
   4. If still tied, the team with the highest alternate score wins.
   5. If still tied, teams will be accompanied by their advisor and will meet with contest officials who will conduct a coin toss to determine the higher placing team.

B. Ties for individual awards will be broken as follows:
   1. The individual with the highest score in the Identification section wins.
   2. If still tied, the individual with the highest score in the Problem Solving section wins.
   3. If still tied, individuals will be accompanied by their advisor and will meet with contest officials who will conduct a coin toss to determine the higher placing individual.

V. REFERENCES

Texas Nursery/Landscape ID lists (Weed, Disease & Disorders, Plant ID, Tools and Pests) can be found on JudgingCard at the following link:
www.judgingcard.com/resources/list.aspx

Printed Materials:
Plants of the Metroplex III (reference
book) Plants for Texas (reference book)
8926 Complete Set AgSc 361 – Landscape Design, Construction, and Maintenance,
IMS 8942 Complete Set AgSc 362 – Horticultural Plant Production, IMS

Video References:
9753D Landscape Design I: Introduction to Landscape Design
9754D Landscape Design II: Landscape Design Process
9839D Landscape Plant Identification – Ground Covers and Shrubs,
9843D Practice Landscape Plant Identification,

CEV 9840D Landscape Plant Identification – Trees

Computer Software:
9432NC Nursery Plant Identification

Books:
Arnold, Michael *A. Landscape Plants for Texas and Environs*. Champaign, Ill.: Stipes Pub., 3rd Edition, 2008.

Biondo, Ronald J., and Charles B. Schroeder. *Landscape Design, Construction, and Maintenance*. Boston, MA: Pearson, 2009.

Bridwell, Ferrell M. *Landscape Plants: Their Identification, Culture and Use*. Albany NY: Delmar, 2001.

Garrett, Howard. *Plants of the Metroplex III*. Asutin: U. of Texas., 1998.

Odenwald, Neil G., and James R. Turner. *Identification, Selection and Use of Southern Plants for Landscape Design*. Baton Rouge: Claitor's Pub. Division, 2006.

Sperry, Neil. *Neil Sperry's Lone Star Gardening: Texas' Complete Planting Guide and Gardening Calendar*. McKinney, TX: Neil Sperry's Gardens, 2014.
Texas Nursery Landscape Association. *Best of Texas Landscape Guide*. Austin, TX: Texas Nursery Landscape Association. 2014.

Keep/Cull Class Reference:
Texas FFA Nursery/Landscape CDE revision committee guidelines posted on JudgingCard.com.

Problem Solving Reference:
Georgia Agriculture Curriculum Resource and Reference website: http://www.gaaged.org/page.aspx?ID=85

Other Websites:
Aggie Horticulture Picture Pages http://aggie-horticulture.tamu.edu/picturepages/tamuhort.html
National FFA website www.ffa.org