**Illinois Association of Vocational Agriculture Teachers**

**Horticulture Career Development Event**

**Contest Superintendent – Gary Ochs, UIUC**

**Assistant Superintendent - Ann Piotrowski, DuQuoin**

**IAVAT CDE Committee Member – Eric Tryggestad, Byron**

**IAVAT CDE Committee Member - Colby Gregg, Naperville Central**

**Host – Nick Wherley, ITCS Media/Communications Specialist**

* 1. General InformationTeam: A team shall consist of five (5) participants. The four (4) individuals with the best scores shall constitute the team score.

# Placings/Scoring:

* + 1. Official placings and reasons will be given immediately following completion of the career development event.
		2. The horticulture career development event is about equally balanced with approximately 50% of the points based on the participant’s knowledge of floriculture and 50% of the points based on the participant’s knowledge of landscaping.
		3. Practicums will be scored and count as part of the participant and team score.
	1. **Scorecards:** The Scantron card used in the event will be posted on iavat.org

# Miscellaneous:

* + 1. The first place FFA team in the state takes its choice of the two divisions (Floriculture or Nursery/Landscape) for the national FFA competition.
		2. The second place FFA team in the state CDE will be offered the other division.
		3. Participants should have clipboards and #2 pencils for use during the CDE.
		4. Participants may use non-programmable (will not store formulas), battery operated calculators if provided by the participant.
		5. Calculators may not be shared.
	1. **Additional Information:** Refer to the "Annual Information and General Rules Section" for the current year for information concerning **Entry Fees, Registration** and **Location** of the career development event.

# Preregistration is required.

* + 1. Each agriculture teacher with either a participant or a team in the Horticulture Career Development Event must pre-register their student(s) in advance of the announced deadline to the IAVAT office.

# Career Development Event Format and Cards Used

* 1. Judge eight (8) classes as follows: (25 points each)
		1. **One** class of cut flowers\* which may include:
			1. Carnation 3. Snapdragon
			2. Gladiolus 4. Spray mum
		2. **Two** classes of flowering container plants\* which may include:
			1. Pot mum 4. African violet
			2. Geranium 5. Kalanchoe
			3. Azalea 6. Cyclamen
		3. **One** class of foliage plants\* which may include:
			1. Jade plant 5. Dumbcane
			2. Peperomia 6. Weeping fig
			3. Philodendron 7. Pilea
			4. Rubber plant 8. Schefflera
		4. **One** class of ground covers\*\* which may include:
			1. Ajuga - *Ajuga reptans*
			2. Ivy - *Hedera helix*
			3. Barren strawberry - *Waldsteinia ternata*
			4. Sedum - *Sedum* species
			5. Wintercreeper euonymus - *Euonymus fortunei*
			6. Vinca - *Vinca minor*
		5. **One** class of deciduous trees or shrubs\*\* which may include:
			1. Maple - *Acer species*
			2. Ash -- *Fraxinus* species
			3. Linden -- *Tilia* species
			4. Burning bush -- *Euonymus* species
			5. Barberry -- *Berberis thunbergii*
			6. Potentilla -- *Potentilla* species
			7. Flowering fruit trees (i.e., crabapple, hawthorn, plum, etc.)
			8. Viburnum -- *Viburnum* species
		6. **Two** classes of evergreen trees, shrubs, or broadleaf plants\*\* which may include:

|  |  |  |
| --- | --- | --- |
| Trees1. Spruce
2. Pine
3. Yew
4. Juniper
 | Shrubs1. Arborvitae
2. Juniper
3. Yew
 | Broadleaf Plants1. Rhododendron
2. Boxwood
3. Holly
 |

* 1. Complete a written examination on general horticulture. This exam consists of 50 multiple choice and/or True/False questions; a Scantron sheet is used to record student responses to questions (100 points).
	2. Identify 50 plant materials which may include: (300 points)
		1. Bulbs, undergrounds stems, or plants
		2. Bedding plants
		3. Foliage plants
		4. Flowering container plants
		5. Cut flowers and foliage
		6. Herbs
		7. Herbaceous perennials
		8. Ground covers and vines
		9. Deciduous shrubs
		10. Deciduous trees
		11. Broadleaf evergreens
		12. Coniferous plants

**Note:** The code sheet that is used to identify the plant materials on the Scantron card is attached with these rules.

* 1. Each participant will complete one (1) floriculture and one (1) landscape practicum (100 points per practicum).
1. **Sample Practicums** (the practicums will be used in a three-year rotation)

# Floriculture

* + 1. **Floral Arrangement – Year 2017 & 2020**

Make a flower arrangement, with a retail value of up to $35.00. The type of arrangement will be announced by the CDE superintendent. All plant and non-plant materials needed to construct the arrangement will be provided. Participants will be allowed sufficient time, not to exceed thirty-five (35) minutes, to complete their arrangements and prepare itemized bills.

Participants will be provided the retail price of the flowers and foliage they will use in their arrangements at the beginning of the practicum. The markup will be built into the retail price of the flowers and foliage used in the arrangement. The retail cost of flowers and foliage given to the participant will be determined by horticulture staff at the University of Illinois.

# Make and Package a Corsage – Year 2018 & 2021

Make and package a corsage, with a retail value of up to $15.00. The type of corsage and information about the corsage will be announced by the CDE superintendent at the beginning of the practicum. All plant and non-plant materials needed to construct and package the corsage will be provided. Participants should be knowledgeable and possess skills to make a corsage. Participants will be allowed sufficient time, not to exceed thirty-five (35) minutes, to complete the construction of the corsage and complete an itemized bill.

# Identifying and Controlling Plant Disorders – Year 2019 & 2022

Each participant will be given a plant with a nutritional, environmental, disease, or insect disorder. If the disorder is nutritional or environmental, the participant will identify the disorder and prescribe treatment. If the disorder is caused by a disease or insect, the participant will describe the preparation and application of a treatment for the disorder. Participants will be allowed sufficient time, not to exceed thirty-five (35) minutes, to complete this practicum.

# Landscape

* + 1. **Nursery Landscape Tool ID – Year 2017 & 2020**

Twenty-five (25) pieces of equipment from the following list will be displayed for participants to identify by technical names. Each piece of equipment will be designated by a number. Samples to identify may include a picture or the actual item. Participants will be allowed sufficient time, not to exceed thirty-five (35) minutes, to complete this practicum.

|  |  |  |
| --- | --- | --- |
| 1. anvil-and-blade pruner2. architect's scale3. bow saw4. broadcast (cyclone)  spreader5. bulb planter6. by-pass pruner7. compressed air sprayer8. chain saw9. drip emitter, irrigation10. dust mask11. edger (power or hand)12. garden (spading) fork13. garden (bow) rake14. gas mask15. gravity (drop) spreader16. grass shears17. hearing protection | 18. hedge shears19. hoe20. leaf rake21. loppers22. mattock23. measuring wheel24. oscillating sprinkler25. planting/earth/soil auger26. pole pruner27. pop-up irrigation head28. post hole digger29. power leaf blower30. power hedge trimmer31. propagation mat32. pruning saw | 33. reel mower34. rotary mower35. rototiller36. round point shovel37. safety goggles38. scoop shovel39. siphon proportioner40. soaker hose41. soil sampling tube42. spade43. square point (flat)  shovel44. string trimmer45. tape measure46. tree caliper47. trowel48. t- square |

# Pruning Nursery Stock – Year 2018 & 2021

This practicum is designed to evaluate participants' knowledge of and ability in 1) assessing the problem presented, 2) reviewing alternative courses of action based on individual knowledge or reference information provided, and 3) deciding on a solution. Possible solutions will be presented in multiple-choice form for the participant to mark on a score sheet.

One or more nursery plants will be displayed with points marked for possible pruning cuts. No plant will actually be pruned. Participants are to evaluate each labeled point and decide if the plant part should be pruned or not for the improvement of the plant's health, form, and overall quality. The answer choice then will be the combination of cuts that should be made. Participants will be allowed sufficient time, not to exceed thirty-five (35) minutes, to complete this practicum.

# Landscape Drawing – Year 2019 & 2022

This practicum is designed to evaluate participants' knowledge of and ability in 1) evaluating a landscape design, 2) reading a landscape drawing, 3) measuring and calculating materials needed to execute a landscape plan, and 4) evaluating factors that affect profitability of a landscape business.

A landscape drawing and scratch paper will be provided to the participants. There will be 10 objective questions about the landscape plan. The questions may include, but are not limited to, such areas as determining how accent was provided in the public area, the form and size specified for a certain plant, the cost of fencing, the number of patio pavers required, the area of sod to be installed, the volume of mulch required, and the labor cost to install a ground cover bed. Participants will be allowed sufficient time, not to exceed thirty-five (35) minutes, to complete this practicum.

# Suggested References

**ITCS University of Illinois**

X190 Horticulture Plant Identification Flash Cards (new)
 https://pubsplus.illinois.edu/X190.html
MDS690 Horticulture Plant Identification – Digital Flash Card Set CD-ROM (new)
 <https://pubsplus.illinois.edu/MDS690.html>

A catalog of instructional materials is available from ITCS Instructional Materials at <https://pubsplus.illinois.edu/>. To place an order please call 1-800-345-6087, fax your order to 217-333-3917, or email pubsplus@illinois.edu

# Miscellaneous

Dirr, M.A. 1998. *Manual of Woody Landscape Plants.* Stipes Publishing Co., 10-12 Chester St., Champaign, IL

Griffiths, M. 1994. *Index of Garden Plants.* Timber Press, Inc., Portland, OR

Hartmann, H.T. & D.E. Kester. 2002. *Plant Propagation.* Prentice-Hall, Inc., Englewood Cliffs, NJ.

Janick J. 1986. *Horticultural Science.* W.H. Freeman and Company, San Francisco, CA. Schrock, D. (editor), 2001. *Illinois Master Gardener Manual.* ITCS Instructional Materials,

University of Illinois, Urbana, IL

Still S. 1995. *Manual of Herbaceous Ornamental Plants.* Stipes Publishing Co., 10-12 Chester St., Champaign, IL

# Judging Guides

\* Classes 1a through 1c shall be judged according to:

University of Wisconsin at River Falls. A manual for flower judging (Pi Alpha Xi), eighth edition. Department of Plant and Earth Science, River Falls, WI 54022. (715)425- 3345

\*\* Classes 1d through 1f shall be judged according to:

American Association of Nurserymen. 1973. American Standards for Nursery Stock. AAN, 230 Southern Building, Washington, DC.

# Other

*Career Development Events Handbook 2017-2021.* National FFA Organization, P.O. Box 68960, 6060 FFA Drive, Indianapolis, IN.46268-6060.