

***NURSERY/LANDSCAPE
CAREER DEVELOPMENT EVENT***

RULES AND REGULATIONS

TEAM COMPETITION



ALABAMA FFA ASSOCIATION

TABLE OF CONTENTS

Purpose.....	1
Eligibility and Regulations.....	1
District Event.....	1
State Event.....	2
Event Phases.....	3
Scoring the State Event.....	5
State Awards.....	5
Sponsors.....	5
Recommended References.....	6
Plant Identification List.....	9-10
Nursery Landscape Plant Pest and Disorders Identification Sheet.....	11
Nursery Landscape Equipment and Supplies Identification Sheet.....	12
Written Customer Assistance Score Card.....	13
Verbal Customer Assistance Score Card.....	14
Potting Plants Score Card.....	15
Plant Propagation Score Card.....	16

Alabama State Department of Education, Dr. Eric G. Mackey, State Superintendent of Education

The Alabama State Board of Education and the Alabama State Department of Education do not discriminate on the basis of race, color, disability, sex, religion, national origin, or age in its programs, activities, or employment and provide equal access to the Boy Scouts and other designated youth groups. The following person is responsible for handling inquiries regarding the non-discrimination policies: Title IX Coordinator, Alabama State Department of Education, P.O. Box 302101, Montgomery, AL 36130-2101, telephone (334) 694-4746.

Revised September 2020
Nursery/Landscape CDE Committee

NURSERY/LANDSCAPE CAREER DEVELOPMENT EVENT

PURPOSE

To give FFA members an opportunity to use the nursery and landscape skills they have acquired in Agriscience Education courses and to make FFA members more fully aware of the horticultural enterprises in Alabama.

ELIGIBILITY AND REGULATIONS

1. For specific eligibility of participants, refer to the Contests and Awards Booklet.
2. Only district eliminations will be held prior to the state event.
3. The top four place winners in the North, Central and South Districts will compete in the state finals.
4. If a cell phone is seen or heard in the possession of a competitor, that individual student will be disqualified from competition and receive a score of zero.
5. The team will consist of a maximum of four members. The team's total score will be based on the sum of the points earned by the three highest scoring participants on the team.
6. Competitors must enter their name on the scorecard or they will receive a score of zero. Judges will not attempt to figure out who the card belongs to.

DISCLAIMER

In the event that contests (CDE, LDE, TDE's) cannot be held in person, a virtual option may be conducted. Contest rules and guidelines are subject to change to meet the needs of a virtual experience.

ALTERNATE POLICY

For district level events, if a chapter brings alternates there will be no more than two alternates allowed per team. Alternates will use a copy of the scan form (not an original) for those events scored via judgingcard.com. If more than four official scan forms are turned in for a chapter in one event, the highest score(s) for that team will be disqualified and deleted until the chapter only has four team members in the scoring system. Alternates must not be in groups with official team members.

For state level events, alternates are not allowed.

DISTRICT EVENT

1. The event will be held at regular district event eliminations.
2. A team will consist of a maximum of four members. The top three scorers will make up the team score.
3. The event will have three required phases.
 - Identification of Plants, Pests, Disorders and Materials (25 specimens) -- 6 points each
 - **Note: "Cuttings may be substituted for live specimens."**
 - General Knowledge Examination (50 questions) -- 4 points each
 - Landscape Estimating – (20 Questions) – 10 points each

4. Additional phases may be included in the event. Each district will decide what, if any, will be included.
5. Participants will have 30 minutes to complete the written examination, and one minute per specimen/ item for identification of plant materials and tools, locate on identification list, and complete scantron. Students will have 60 minutes to complete the Landscape Estimating portion of the event.
6. The district event will be scored as follows.
 - Individual scores will be the sum of the scores on the three required phases.

<u>Phase</u>	<u>Possible Points</u>
Written Examination -----	200 points
Identification -----	150 points
Landscape Estimating-----	200 points

- The team score will be the sum of the scores of the three highest team members (A team may consist of four contestants, with the lowest score being dropped.)

NOTICE If ties occur at the district event, the team with the highest combined score in the general knowledge examination phase will be the winner. If still tied, select the team with the highest combined score in the Identification of plant materials phase. Same order when there are high scoring individual ties.

STATE EVENT

1. A team will consist of a maximum of four members. The top three scorers will make up the team score.
2. Participants entering the Nursery and Landscape Career Development Event may not enter the FFA Floriculture Career Development Event the same year.
3. The event will have six phases.
 - Identification of Plants, Pests, Disorders, Beneficial Insects, Equipment and Supplies
 - General Knowledge Examination
 - Landscape Estimating
 - Verbal Customer Assistance
 - Written Customer Assistance
 - Nursery Propagation or potting
4. Any communication between participants during the event will be sufficient cause to eliminate the team(s) involved from the event.
5. Any assistance given to a team member from any source during the event will be sufficient cause to eliminate the team from the event.

NL-3

6. Under no circumstance will any participant be allowed to touch or handle plant material or equipment in the Identification of Plant Materials phase of the event. Any infraction of this policy will be sufficient cause to eliminate the team from the event.

7. References -- A list of references for use as a guide in training teams may be made available, but the event will not be based exclusively on these references. See the Recommended References section.
8. Coaches/Advisors may not enter the event area until the event has been completed.
9. The state event will be held during the State FFA Convention.

STATE EVENT PHASES

Phase 1 -- IDENTIFICATION OF PLANTS, PESTS, DISORDERS AND MATERIALS (150 points)

- **Note: "Cuttings may be substituted for live specimens."**

Participants will identify Fifty (50) items selected from the provided list covering the following categories:

- Plant Materials
- Beneficial Insects, Pests and Disorders
- Equipment and Supplies

Plants to identify will be presented as intact, live specimens **or cuttings**. Equipment may be either an intact item or photograph. Pest and disorder items may be presented as an intact specimen, photograph or preserved specimen (herbarium sheet, insect mount, etc.).

When a problem must be presented with an affected plant, a "Disorder" label will be with the item to designate identification of the problem instead of the plant.

Each specimen will be designated by a station number. When the participant identifies the item, its name is then located on the identification list. The participant then records the number by that name on a scan form at the respective station number. This must be done within the 45 second per specimen time constraint. Each participant will be provided a copy of the list at the event site. No specimens or items may be touched or handled in any way. Each answer has a value of three points.

Phase 2 -- GENERAL KNOWLEDGE EXAMINATION (150 points)

Fifty (50) objective-type, multiple-choice questions will be selected from the areas listed below. This phase of the event will test the participant's knowledge and understanding of basic horticultural principles in producing, marketing, using and maintaining landscape plants and turf. Each participant will be allowed approximately 30 minutes to complete this phase. Each answer has a value of three points.

- Plant Materials
- Planting or Growing Media
- Diagnosis of Plant Disorders
- Materials (Growth Regulators, Fertilizer, etc.)
- Propagation
- Safety
- Cultural Instructions
- Landscape Design, Establishment, and Maintenance
- Turf and Lawn Establishment and Maintenance

NL-4

Phase 3 -- LANDSCAPE ESTIMATING (100 points)

Participants will be furnished with a landscape drawing and scratch paper. Participants will answer 20 objective questions designed to evaluate his/her knowledge of and ability in

evaluating a landscape design; reading a landscape drawing; determining materials needed to execute a landscape plan; maintenance estimating and bidding; and evaluating factors that affect profitability of a landscape business. Each answer has a value of 5 points. A scantron sheet will be used as the score sheet. Approximately 60 minutes will be allowed for this practicum. Simple calculators (those which perform the basic math skills) will be allowed. Participants may use a ruler or scale to assist in this phase, however, they must be provided by the participants themselves.

Phase 4 -- WRITTEN CUSTOMER ASSISTANCE (50 points)

The participant will assume the role of a customer service representative. A copy of correspondence about a plant, landscape, or business question will be provided, along with the appropriate response information. Each participant will hand-write, in ink pen and in business letter format, the response to the writer. Scratch paper will be provided for a rough draft in pencil if desired. Only the final draft in ink on the letterhead stationary provided will be scored. Thirty (30) minutes will be allowed for the practicum. A pocket size dictionary or electronic speller is allowed for checking spelling. Scoring criteria are presented on the "Written Customer Assistance" score card, which will be recorded by a judge.

Phase 5 -- VERBAL CUSTOMER ASSISTANCE (50 points)

This interpersonal relations practicum is designed to evaluate participant knowledge of and ability in 1) verbal communication, 2) sales and customer assistance skills, 3) plant materials, plant culture and problems, 4) nursery and landscape supplies and equipment. The participant will assume the role of a customer service representative (garden center or other related business or an educational agency) responding to an assistance need of the customer or client (the judge). General themes might include, but are not limited to, the following: clinic diagnosis or recommendations; care advice; sales of plants, equipment, treatments; deal with complaints. Each participant will be located at a station with one minute allotted to review the materials and information provided prior to arrival of the judge. These materials may be handled and referred to as appropriate for the conversation with the judge. Plants, disorders, supplies not listed on the material and plant resource lists will be communicated prior to the event. Scoring criteria are listed on the respective scorecard.

Phase 6 -- NURSERY PROPAGATION OR POTTING (50 points)

This practicum is designed to evaluate participant knowledge of and ability in performing fundamental nursery production practices. All participants will perform one of the following exercises. The selected exercise will not be announced prior to the start of the event. The participant will have 5 minutes to complete the task unless otherwise stated by the contest officials prior to the start of this portion of the event. Judges will ask clarifying questions of the students.

NL-5

a. Propagating Nursery Stock — Each participant will be furnished a stock plant, or stock plant material, rooting flat and media, rooting hormone, a hand pruner, a label and marking pen. (Personal propagating knives or pruners are allowed, if desired.) Participants are to prepare the designated softwood or hardwood cuttings and place them in the media with a single label.

b. Potting Nursery Stock — Each participant will be furnished a supply of plants, nursery containers or pots of appropriate size and media. Hand pruners, a label and a marking pen will also be provided. (Personal pruners are allowed, if desired.) The participants will pot the plants, one per container, using standard nursery practices. Plant division or grading of liners may be involved. One finished container will be labeled.

An official will observe and score each participant during the application of the practicum. Following completion of the assigned practicum the official will ask questions regarding the propagation or potting activity. Scoring criteria are listed on the respective scorecards.

SCORING THE STATE EVENT

Individual scores will be the sum of the scores of Phases 1, 2 and 3 of the event.

<u>Phase</u>	<u>Possible Points</u>
1. Identification of Plants, Pests Disorders and Materials	150
2. General Knowledge Examination	150
3. Landscape Estimating	100
4. Written Customer Assistance	50
5. Verbal Customer Assistance	50
6. Nursery Propagation or Potting	<u>50</u>
Total Possible Points	550

Note: If a team consists of four members, the lowest individual team member's score will be dropped.

Team scores will be the sum of the three highest team members individual scores (1,650 points possible).

If ties occur at the state event, the total of the three team members' scores in the following events will be used in the order that they are listed to determine the winner:

- 1) Written Examination
- 2) Plant Identification
- 3) Landscape Estimating
- 4) Written Customer Assistance

Same order as the above when there are ties for high scoring individual.

STATE AWARDS/SPONSOR(S):

Refer to Alabama FFA Contests and Awards Booklet at:

http://www.alabamaffa.org/forms_applications.htm

NL-6

RECOMMENDED REFERENCES

The following list of references is a guide to team training. Some content areas have more than one title listed. This reflects the wide array of quality references available that will provide a proper foundation for this event. No single reference is recommended as superior over others in that area. Other references than those listed may be equally valuable resources, along with the many videos and computer-based training aids that are available.

Books

Introduction to Horticulture. 4th Edition, 2004. Charles B. Schroeder, Eddie Dean Seagle, Lorrie M. Felton, John M. Ruter, William Terry Kell, and Gerard Krewer. Printice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0130364134

Introductory Horticulture. 6th Edition, 2002. H. Edward Reiley and Carroll L. Shry, Jr. Delmar Publishers Inc., Albany, NY. ISBN 0766815676

Ornamental Horticulture: Science, Operations and Management. 3rd Edition, 2001. Jack Ingels. Delmar Publishers Inc., Albany, NY. ISBN 0766814173

Introduction to Plant and Soil Science and Technology. 2003. Ronald J. Biondo and Jasper S. Lee. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0813432162

Practical Horticulture. 5th Edition. 2003. Laura W. Rice and Robert P. Rice. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0130946346

Plant Propagation: Principles and Practices. 6th Edition, 1997. Hudson T. Hartmann, Fred T. Davies, Jr., Dale E. Kester, and Robert L. Genieve. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0132061031

Nursery Production - A Teachers Manual. Revised edition, 1989. Department of Agricultural Education, Pennsylvania State University, University Park, PA.

Nursery Management: Administration and Culture. 4th Edition, 2000. Harold Davidson, Roy Mecklenburg, and Curtis Peterson. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0138579962

American Standard for Nursery Stock. 2004. American Association of Nurserymen, Inc., 1250 I St., NE, Suite 500, Washington, DC. (available as pdf file free to nonmembers at <http://www.anla.org>)

Landscape Plants: Their Identification, Culture, and Use. 2nd Edition. 2003. Ferrell M. Bridwell. Delmar Publishers Inc., Albany, NY. ISBN 0766836347

Manual of Woody Landscape Plants. 5th Edition, 1998. Michael A. Dirr. Stipes Publishing Co., Champaign, IL. ISBN 0875638007

Trees for Urban and Suburban Landscapes. 1997. Edward Gilman. Delmar Publishers Inc., Albany, NY. ISBN 0827370539

A Field Guide to Woody Landscape Plants of the Southeast. 2002. Rex Bishop. Tea Olive Productions. Marietta, GA ISBN097253430X

NL-7

Know It and Grow It III: A Guide to the Identification and Use of Landscape Plants. 1999. Carl E. Whitcomb. Lacebark, Inc. Stillwater OK ISBN 0961310910

Introduction to Landscaping: Design, Construction, and Maintenance. 3rd Edition, 2003. Ronald J. Biondo and Charles B. Schroeder. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0813431719

Landscaping: Principles and Practices. 6th Edition, 2004. Jack Ingles. Delmar Publishers Inc., Albany, NY. ISBN 1401834108

Landscape Design: A Practical Approach. 5th Edition, 2002. Leroy G. Hannebaum. Prentice-Hall, Inc., Englewood Cliffs, NJ. 0130105813

An Illustrated Guide to Landscape Design, Construction, and Management. 1998. Gregory M. Pierceall. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN0813430194

Landscaping Construction. 2nd Edition. 2005. David Sauter. Delmar Publishers Inc., Albany, NY. ISBN 140184281X

Landscape Construction Procedures, Techniques, and Design. 4th Edition, 1999. Floyd Giles. Stipes Publishing Co., Champaign, IL. ISBN 0875638848

Landscape Operations: Management, Methods, and Materials. 3rd Edition, 1999. Leroy Hannebaum. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0138569150

Professional Landscape Management. 1994. David L. Hensley. Stipes Publishing Co., Champaign, IL. ISBN 0875635210

Arboriculture: Integrated Management of Landscape Trees, Shrubs and Vines. 4th Edition, 2004. Richard W. Harris, James R. Clark, and Nelda P. Matheny. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0130888826

Turfgrass Science and Management. 3rd Edition, 2000. Robert D. Emmons. Delmar Publishers Inc., Albany, NY. ISBN 076681551X

Turfgrass Management. 7th Edition, 2005. A.J. Turgeon. Prentice-Hall, Inc. Englewood Cliffs, NJ. ISBN 0131140000

Turfgrass Management Handbook. 6th Edition, 2002. Charles B. Schroeder and Howard B. Sprague. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0813430836

Ortho Problem Solver. 6th Edition, 2003. Michael McKinley (ed.). Meredith Books. Des Moines, IA. ISBN 0897214943

Home Gardener's Problem Solver. 2001. Michael McKinley. Meredith Books. Des Moines, IA. ISBN 0897214706

Insects That Feed on Trees and Shrubs. 2nd Edition, 1991. Warren T. Johnson and Howard H. Lyon. Comstock Publishing Associates, Ithaca, NY. ISBN 0801426022

Diseases of Trees and Shrubs. 1987. Wayne A. Sinclair, Howard H. Lyon, and Warren T. Johnson. Comstock Publishing Associates, Ithaca, NY. ISBN 0801415179

NL-8

Mathematics for Horticulture. 1994. Ohio Agricultural Education Curriculum Materials Service, The Ohio State University, Columbus, OH. Item #9512M

Care and Operation of Small Gasoline Engines. 1990. American Association for Vocational Instructional Materials, Athens, GA. No. 1086W

Reference Manual for Office Personnel. 6th Edition, 1991. Clifford R. House and Kathie Sigler. South-Western Publishing Co., Cincinnati, OH. ISBN 0538114517

Business Communications. 2004. A.C. Krizon, Patricia Merrier, Carol Jones Larson. South-Western Publishing Co., Cincinnati, OH. ISBN 0324272251

Ornamental Horticulture for Agribusiness Education in Alabama. Agriscience Education, 3410 Skyway Drive, Auburn, AL 36830-6444.

Horticulture/Floriculture Student Study Guide. Agriscience Education, 3410 Skyway Drive, Auburn, AL 36840-6444.

Horticulture Test Bank. Agriscience Education, 3410 Skyway Drive, Auburn, AL 36830-6444.

Trade Periodicals

American Nurseryman. American Nurserymen Publishing Co., Chicago, IL

Grounds Maintenance. Primedia, Overland Park, KS.

Catalogs

Many horticultural supply company catalogs can be utilized for reference support on tools, equipment, and supplies that may not be illustrated in other sources. The Following company has given permission for listing their catalog:

A.M. Leonard, Inc., 665 Spiker Road, Piqua, OH 45356 (513/773-2697 or <http://www.amleo.com/index1.html>)

Websites and Problem Samples

Visit the national FFA website at <http://www.ffa.org/> for information on career development events, access to prior-year event materials, and links to additional study aids. The Nursery/Landscape CDE committee website at <http://www.hort.vt.edu/faculty/McDaniel/nationalFFA.htm> also offers additional aids for team preparation. Additional Links and resources will be included as they are developed or identified, along with the following links of the CDE sponsors:

<http://www.stihlusa.com/knowhow/>

<http://www.kubota.com>

<http://www.arvesta.com/>

NL-9

Nursery Landscape Plant List

No.	Botanical Name/Common Name	No.	Botanical Name/Common Name
-----	----------------------------	-----	----------------------------

101 *Abelia x grandiflora* / Glossy Abelia
 102 *Abies concolor* / White Fir
 103 *Acer palmatum cv.* / Japanese Maple
 104 *Acer platanoides cv.* / Norway Maple
 105 *Acer rubrum cv.* / Red Maple
 106 *Acer saccharum cv.* / Sugar Maple
 107 *Ajuga reptans cv.* / Carpet Bugle
 108 *Antirrhinum majus cv* / Snapdragon
 109 *Aquilegia x hybrida cv.* / Columbine
 110 *Amelanchier arborea* / Downy Serviceberry
 111 *Astilbe hybrid cv.* / Astilbe
 112 *Begonia semperflorens-cultorum* / Wax Begonia
 113 *Berberis x mentorensis* / Mentor Barberry
 114 *Betula nigra* / River Birch
 115 *Brassaia actinophylla* / Schefflera, Octopus Tree
 116 *Buxus microphylla cv.* / Littleleaf Boxwood
 117 *Camellia japonica cv.* / Common Camellia
 118 *Cedrus atlantica 'Glauca'* / Blue Atlas Cedar
 119 *Cercis canadensis* / Redbud
 120 *Chaenomeles speciosa cv.* / Japanese (Flowering) Quince
 121 *Clematis hybrid* / Clematis
 122 *Cornus florida cv.* / Flowering Dogwood
 123 *Cotoneaster dammeri* / Bearberry Cotoneaster
 124 *Cotoneaster divaricatus* / Spreading Cotoneaster
 125 *Crataegus phaenopyrum* / Washington Hawthorn
 126 *Cynodon dactylon cv* / Bermudagrass
 127 *Dieffenbachia maculata cv.* / Spotted Dumb Cane
 128 *Dracaena deremensis 'Warneckii'* / Striped Dracaena
 129 *Dracaena fragens 'Massangeana'* / Corn Plant
 130 *Echinace purpurea* / Purple Coneflower
 131 *Epipremnum spp.* / Pothos
 132 *Euonymus alatus* / Winged Euonymus
 133 *Euonymus fortunei cv.* / Wintercreeper
 134 *Fagus sylvatica cv.* / European Beech
 135 *Festuca spp. and cv* / Fescue

136 *Ficus benjamina* / Benjamin Fig
 137 *Ficus elastica 'Decora'* / Decora Rubber Plant
 138 *Forsythia x intermedia cv.* / Border Forsythia
 139 *Fraxinus americana cv.* / White Ash
 140 *Gaillardia aristata cv.* / Common Blanketflower
 141 *Gardenia jasminoides 'Fortuniana'* / Common Gardenia
 142 *Ginkgo biloba* / Ginkgo, Maidenhair Tree
 143 *Gleditsia triacanthos inermis cv.* / Thornless Honeylocust
 144 *Hedera helix cv.* / English Ivy
 145 *Hemerocallis spp. and cv.* / Day lily
 146 *Hosta x hybrida cv.* / Plaintain Lily
 147 *Hydrangea quercifolia* / Oakleaf Hydrangea
 148 *Hydrangea macrophylla* / Bigleaf Hydrangea
 149 *Ilex cornuta cv.* / Chinese Holly
 150 *Ilex crenata cv.* / Japanese Holly
 151 *Ilex x meserveae cv.* / Meserve Holly
 152 *Impatiens hybrid cv.* / Impatiens
 153 *Iris x germanica florentina cv.* / Bearded Iris
 154 *Juniperus chinensis cv./* Juniper Chinese
 155 *Juniperus horizontalis cv.* / Creeping Juniper
 156 *Lagerstroemia indica cv* / Crape Myrtle
 157 *Leucanthemum x superbum cv.* / Shasta Daisy
 158 *Liquidambar styraciflua* / Sweet Gum
 159 *Liriodendron tulipifera* / Tuliptree
 160 *Liriope spp. cv.* / LilyTurf
 161 *Lonicera japonica 'Halliana'* / Hall's Japanese Honeysuckle
 162 *Magnolia grandiflora cv.* / Southern Magnolia
 163 *Magnolia x soulangiana cv.* / Chinese (Saucer) Magnolia
 164 *Mahonia aquifolia cv.* / Oregon Grape
 165 *Malus spp. and cv.* / Flowering Crabapple

NL-10

Nursery Landscape Plant List

No.	Botanical Name/Common Name	No.	Botanical Name/Common Name
-----	----------------------------	-----	----------------------------

166 Myrica pensylvanica / Bayberry
167 Nandina domestica / Heavenly Bamboo
168 Narcissus pseudonarcissus cv. / Daffodil
169 Nyssa sylvatica / Sour (Black) Gum
170 Pachysandra terminalis / Japanese Spurge
171 Paeonia hybrid cv. / Peony
172 Parthenocissus tricuspidata / Boston Ivy
173 Pelargonium x hortorum cv. / Zonal Geranium
174 Pennisetum ruppelia / Fountain Grass
175 Petunia x hybrida cv. / Petunia
176 Philodendron scandens oxycardium / Heartleaf Philodendron
177 Picea abies / Norway Spruce
178 Picea pungens cv. / Colorado (Blue) Spruce
179 Pieris japonica / Lily-of-the-Valley Bush
180 Pinus mugo / Mugo Pine
181 Pinus strobus / Eastern White Pine
182 Pinus sylvestris / Scotch Pine
183 Pinus thunbergiana / Japanese Black Pine
184 Platanus x acerifolia / London Planetree
185 Poa pratensis cv Kentucky Bluegrass
186 Podocarpus macrophyllus / Southern Yew
187 Potentilla fruticosa cv. / Shrubby Cinquefoil
188 Prunus laurocerasus cv. / Cherry Laurel
189 Prunus serrulata 'Kwanzan' / Kwanzan Japanese Flowering Cherry
190 Pyracantha coccinea cv. / Firethorn
191 Quercus alba / White Oak
192 Quercus palustris / Pin Oak
193 Quercus rubra / Red Oak

194 Rhododendron x catawbiense / Catawba Hybrid Rhododendron
195 Rhododendron Hybrid / Exbury Hybrid Azalea
196 Rosa app. / Landscape/Shrub Rose cv.
197 Salvia nemorosa cv. / Meadow Sage
198 Sedum spurium cv. / Sedum
199 Solenostemon scutellarioides / Coleus
200 Sorbus aucuparia / European Mountain Ash
201 Spiraea x bumalda / Bumalda Spirea
202 Syringa vulgaris cv. / Common Lilac
203 Tagetes spp. cv. / Marigold
204 Taxodium distichum / Bald Cypress
205 Taxus spp. and cv. / Yew
206 Thuja occidentalis cv. / American Arborvitae
207 Tilia cordata / Littleleaf Linden
208 Tsuga canadensis / Canadian Hemlock
209 Tulipa spp. cv. / Tulip
210 Verbena x hybrida cv. / Garden Verbena
211 Viburnum x burkwoodii / Burkwood Viburnum
212 Viburnum trilobum / American Cranberrybush Viburnum
213 Vinca minor cv. / Periwinkle
214 Viola x wittrockiana cv. / Pansy
215 Wisteria sinensis cv. / Chinese Wisteria
216 Yucca filamentosa / Adam's Needle

NL-11

Nursery Landscape Pests and Disorders Identification

No. Item Name	No. Item Name
---------------	---------------

Pests

- 217 Aphid
- 218 Bagworm
- 219 Borer
- 220 Leafhopper
- 221 Leaf Miner
- 222 Scale
- 223 Spider Mite
- 224 Snail/Slug
- 225 Whitefly
- 226 White Grub

Diseases

- 227 Anthracnose
- 228 Apple Scab
- 229 Black Spot
- 230 Botrytis
- 231 Canker
- 232 Cedar-Apple Rust
- 233 Crown Gall
- 234 Fireblight
- 235 Powdery Mildew
- 236 Root Rot

Weeds

- 237 Annual Bluegrass
- 238 Broadleaf Plantain
- 239 Buckhorn Plantain
- 240 Chickweed
- 241 Crabgrass
- 242 Dandelion
- 243 Henbit
- 244 Nutsedge
- 245 Oxalis
- 246 Purslane
- 247 White Clover

Physiological Problems

- 248 Frost/Freeze Injury
- 249 Iron Deficiency
- 250 Leaf Scorch (drought/winter burn)
- 251 Nitrogen Deficiency
- 252 Pot-bound roots
- 253 String Trimmer Injury
- 254 2,4-D Injury

Beneficial Insects

- 255 Praying Mantis
- 256 Lady Beetle
- 257 Paper Wasp
- 258 Lacewing
- 259 Spider

NL-12

Nursery Landscape Equipment and Supplies Identification

No. Item Name	No. Item Name	No. Item Name
----------------------	----------------------	----------------------

260 anvil-and-blade pruner	286 ground/pelleted limestone	318 quick coupler
261 ball cart (B&B truck)	287 hedge shears	319 quick coupler head adapter
262 bark mulch	288 hoe	320 reel mower
263 bow saw	289 hook-and-blade pruners	321 resin-coated fertilizer
264 broadcast (cyclone) spreader	290 hose-end repair fitting	322 rotary mower
265 bubbler head, irrigation	291 hose-end sprayer	323 rototiller
266 bulb planter	292 hose-end washer	324 round point shovel
267 bunker rake	293 hose repair coupling	325 scoop shovel
268 burlap	294 impact sprinkler	326 shade fabric
269 compressed air sprayer	295 irrigation ring tool	327 sharpening stone
270 core aerifier	296 landscape fabric	328 siphon proportioner
271 chain saw	297 leaf rake	329 soaker hose
272 cut-off machine	298 loppers	330 soil sampling tube
273 drip emitter, irrigation	299 mattock	331 solenoid valve
274 dry-lock wall block	300 measuring wheel	332 spade
275 edger (power or hand)	301 mist nozzle (mist bed)	333 sphagnum moss
276 edging	302 mower blade balancer	334 square point (flat) shovel
277 erosion netting	303 nursery container	335 string trimmer
278 fertilizer injector	304 oscillating sprinkler	336 thatch rake
279 fertilizer tablet	305 peat moss	337 tree caliper
280 garden (spading) fork	306 pick axe	338 tree wrap
281 garden (bow) rake	307 planting/earth/soil auger	339 trowel
282 grafting band	308 pole pruner	340 vertical mower
283 grafting knife	309 polyethylene pipe	341 water breaker
284 granular fertilizer	310 pop-up irrigation head	342 wire tree basket
285 gravity (drop) spreader	311 post-hole digger	
	312 power blower	
	313 power hedge trimmer	
	314 pot-in-pot units	
	315 pump sprayer	
	316 propagation mat	
	317 pruning saw	

NL-13

WRITTEN CUSTOMER ASSISTANCE PRACTICUM SCORE SHEET

Name _____ Chapter _____

	Possible Points	Score
Customer Relations <ul style="list-style-type: none"> Does the letter create/maintain goodwill (is it free of negative words that create an unpleasant tinge)? Is the tone appropriate for the letter purpose? Does the letter emphasize reader (you) rather than writer (I)? Is the tone and reading level appropriate for reader? 	10	
Business Letter Form <ul style="list-style-type: none"> Is the letter written in acceptable business format including the date, inside address, salutation, body, complimentary close, signature and additional data (pc, enclosure, etc.)? 	10	
Organization <ul style="list-style-type: none"> Is the content organized in logical, coherent order? Is the letter properly divided into paragraphs with topic sentences? Is the letter divided into sentences which clearly convey key points? Does the letter use short conversational words? 	10	
Technical Information <ul style="list-style-type: none"> Is the technical information provided in letter correct? Is the information provided in simple, clear, concise manner? Does the letter relate directly to the inquiry? 	10	
Grammar/Punctuation <ul style="list-style-type: none"> Is the letter free of grammatical, punctuation and spelling errors? 	10	

Score	50	
--------------	----	--

NL-14

VERBAL CUSTOMER ASSISTANCE PRACTICUM SCORE SHEET

Name _____ Chapter _____

	Possible Points	Member Score
Conversation: (40 points possible)		
Approach	4	

<ul style="list-style-type: none"> • Effective Greeting and offers to help. • Positive, Enthusiastic and not hesitant. 		
Personality <ul style="list-style-type: none"> • Pleasant and friendly manner. • Not pushy to sale. 	8	
Voice <ul style="list-style-type: none"> • Easy to hear and understand. • Proper grammar used; good speaking form. 	8	
Information Requested From Customer <ul style="list-style-type: none"> • Determines assistance needs. • Effectively asks details and preferences. 	8	
Salesmanship <ul style="list-style-type: none"> • Effective and tries to expand sale. • Develops Customer confidence in product/ service. 	8	
Closing <ul style="list-style-type: none"> • Repeats order and handles payment. (if applicable) • Asks if instructions are understood. • “Thank You” Close. 	4	
<i>Product Problem Procedure Presentation: (10 points possible)</i>		
Correct Product/ Procedure Presentation	4	
Correct Product/ Problem Information Provided	4	
Clarity of Information Provided to customer	2	

Score	50	
--------------	-----------	--

NL-15

POTTING NURSERY STOCK PRACTICUM SCORECARD

	Possible Points	Member Score
<i>Potting Process (34 points)</i>		
Preparation of Plants		
<ul style="list-style-type: none"> • Plants selected for quality and uniformity • Inspects/prunes/grooms damaged parts • Prunes excess root length • Handles plants properly 	10	
Placement of plants in containers		
<ul style="list-style-type: none"> • Plant centered and vertical • Roots carefully and properly spread • Plant at proper depth • Plant roots covered 	10	
Media Filling and Settling		
<ul style="list-style-type: none"> • Sufficient media added • Media settled by bumping or hand firming • Plant remains stable 	10	
Labeling of Complete Units		
<ul style="list-style-type: none"> • Plant (variety) name and date • Legible 	2	
Safety Practices Applied		
<ul style="list-style-type: none"> • Proper cutting technique • Tool closed when finished • Minimal clutter/good organization in work area 	2	
<i>Potting Productivity (10 points)</i>		
Number of units Completed	5	
Quality and uniformity of units Completed <ul style="list-style-type: none"> • Overall quality and uniformity of lot 	5	
<i>Questions (6 points)</i>		
Response to Questions	6	
Total Points	50	

PROPAGATING NURSERY STOCK PRACTICUM SCORECARD

Name _____ Chapter _____

	Possible Points	Member Score
<i>Propagation Process (34 points)</i>		
Removal of Cuttings		
<ul style="list-style-type: none"> • Selects best quality, uniform stock • Cuts at appropriate lengths • Makes clean cuts 	5	
Preparation of Cuttings		
<ul style="list-style-type: none"> • Leaves stripped/trimmed/groomed as needed • Proximity of cuts to nodes • Angled or wounded basal cut • Cutting/buds not damaged 	10	
Application of Proper Hormone		
<ul style="list-style-type: none"> • Sufficient applied and excess removed • Hormone kept clean 	7	
Placement of Cuttings in Media		
<ul style="list-style-type: none"> • Proper medium depth, as applicable • Media furrow cut and closed • Proper sticking depth • Efficient row and cutting spacing 	8	
Labeling of Completed Units		
<ul style="list-style-type: none"> • Plant (variety) name, date, treatment • Legible 	2	
Safety Practices Applied		
<ul style="list-style-type: none"> • Proper cutting technique • Tool closed when finished • Minimal clutter in work area 	2	
<i>Propagation Productivity (10 points)</i>		
Number of Units Completed	5	
Quality and Uniformity of Units Completed <ul style="list-style-type: none"> • Uniform size and placement • Cutting stable in media 	5	
<i>Questions (6 points)</i>		
Response to Questions	6	
Total Points	50	