

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

RULES AND REGULATIONS

TEAM COMPETITION



ALABAMA FFA ASSOCIATION

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

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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.

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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

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.

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

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. Prentice-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

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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

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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/>

Nursery Landscape Plant List

No.	Botanical Name/Common Name	No.	Botanical Name/Common Name
101	<i>Abelia x grandiflora</i> / Glossy Abelia	136	<i>Ficus benjamina</i> / Benjamin Fig
102	<i>Abies concolor</i> / White Fir	137	<i>Ficus elastica</i> 'Decora' / Decora Rubber Plant
103	<i>Acer palmatum</i> cv. / Japanese Maple	138	<i>Forsythia x intermedia</i> cv. / Border Forsythia
104	<i>Acer platanoides</i> cv. / Norway Maple	139	<i>Fraxinus americana</i> cv. / White Ash
105	<i>Acer rubrum</i> cv. / Red Maple	140	<i>Gaillardia aristata</i> cv. / Common Blanketflower
106	<i>Acer saccharum</i> cv. / Sugar Maple	141	<i>Gardenia jasminoides</i> 'Fortuniana' / Common Gardenia
107	<i>Ajuga reptans</i> cv. / Carpet Bugle	142	<i>Ginkgo biloba</i> / Ginkgo, Maidenhair Tree
108	<i>Antirrhinum majus</i> cv / Snapdragon	143	<i>Gleditsia triacanthos inermis</i> cv. / Thornless Honeylocust
109	<i>Aquilegia x hybrida</i> cv. / Columbine	144	<i>Hedera helix</i> cv. / English Ivy
110	<i>Amelanchier arborea</i> / Downy Serviceberry	145	<i>Hemerocallis</i> spp. and cv. / Day lily
111	<i>Astilbe</i> hybrid cv. / Astilbe	146	<i>Hosta x hybrida</i> cv. / Plaintain Lily
112	<i>Begonia semperflorens-cultorum</i> / Wax Begonia	147	<i>Hydrangea quercifolia</i> / Oakleaf Hydrangea
113	<i>Berberis x mentorensis</i> / Mentor Barberry	148	<i>Hydrangea macrophylla</i> / Bigleaf Hydrangea
114	<i>Betula nigra</i> / River Birch	149	<i>Ilex cornuta</i> cv. / Chinese Holly
115	<i>Brassaia actinophylla</i> / Schefflera, Octopus Tree	150	<i>Ilex crenata</i> cv. / Japanese Holly
116	<i>Buxus microphylla</i> cv. / Littleleaf Boxwood	151	<i>Ilex x meserveae</i> cv. / Meserve Holly
117	<i>Camellia japonica</i> cv. / Common Camellia	152	<i>Impatiens</i> hybrid cv. / Impatiens
118	<i>Cedrus atlantica</i> 'Glauca' / Blue Atlas Cedar	153	<i>Iris x germanica florentina</i> cv. / Bearded Iris
119	<i>Cercis canadensis</i> / Redbud	154	<i>Juniperus chinensis</i> cv./ Juniper Chinese
120	<i>Chaenomeles speciosa</i> cv. / Japanese (Flowering) Quince	155	<i>Juniperus horizontalis</i> cv. / Creeping Juniper
121	<i>Clematis</i> hybrid / Clematis	156	<i>Lagerstroemia indica</i> cv / Crape Myrtle
122	<i>Cornus florida</i> cv. / Flowering Dogwood	157	<i>Leucanthemum x superbum</i> cv. / Shasta Daisy
123	<i>Cotoneaster dammeri</i> / Bearberry Cotoneaster	158	<i>Liquidambar styraciflua</i> / Sweet Gum
124	<i>Cotoneaster divaricatus</i> / Spreading Cotoneaster	159	<i>Liriodendron tulipifera</i> / Tuliptree
125	<i>Crataegus phaenopyrum</i> / Washington Hawthorn	160	<i>Liriope</i> spp. cv. / LilyTurf
126	<i>Cynodon dactylon</i> cv / Bermudagrass	161	<i>Lonicera japonica</i> 'Halliana' / Hall's Japanese Honeysuckle
127	<i>Dieffenbachia maculata</i> cv. / Spotted Dumb Cane	162	<i>Magnolia grandiflora</i> cv. / Southern Magnolia
128	<i>Dracaena deremensis</i> 'Warneckii' / Striped Dracaena	163	<i>Magnolia x soulangiana</i> cv. / Chinese (Saucer) Magnolia
129	<i>Dracaena fragens</i> 'Massangeana' / Corn Plant	164	<i>Mahonia aquifolia</i> cv. / Oregon Grape
130	<i>Echinace purpurea</i> / Purple Coneflower	165	<i>Malus</i> spp. and cv. / Flowering Crabapple
131	<i>Epipremnum</i> spp. / Pothos		
132	<i>Euonymus alatus</i> / Winged Euonymus		
133	<i>Euonymus fortunei</i> cv. / Wintercreeper		
134	<i>Fagus sylvatica</i> cv. / European Beech		
135	<i>Festuca</i> spp. and cv / Fescue		

Nursery Landscape Plant List

No.	Botanical Name/Common Name	No.	Botanical Name/Common Name
166	Myrica pensylvanica / Bayberry	194	Rhododendron x catawbiense / Catawba Hybrid Rhododendron
167	Nandina domestica / Heavenly Bamboo	195	Rhododendron Hybrid / Exbury Hybrid Azalea
168	Narcissus pseudonarcissus cv. / Daffodil	196	Rosa app. / Landscape/Shrub Rose cv.
169	Nyssa sylvatica / Sour (Black) Gum	197	Salvia nemorosa cv. / Meadow Sage
170	Pachysandra terminalis / Japanese Spurge	198	Sedum spurium cv. / Sedum
171	Paeonia hybrid cv. / Peony	199	Solenostemon scutellarioides / Coleus
172	Parthenocissus tricuspidata / Boston Ivy	200	Sorbus aucuparia / European Mountain Ash
173	Pelargonium x hortorum cv. / Zonal Geranium	201	Spiraea x bumalda / Bumalda Spirea
174	Pennisetum ruppelia / Fountain Grass	202	Syringa vulgaris cv. / Common Lilac
175	Petunia x hybrida cv. / Petunia	203	Tagetes spp. cv. / Marigold
176	Philodendron scandens oxycardium / Heartleaf Philodendron	204	Taxodium distichum / Bald Cypress
177	Picea abies / Norway Spruce	205	Taxus spp. and cv. / Yew
178	Picea pungens cv. / Colorado (Blue) Spruce	206	Thuja occidentalis cv. / American Arborvitae
179	Pieris japonica / Lily-of-the-Valley Bush	207	Tilia cordata / Littleleaf Linden
180	Pinus mugo / Mugo Pine	208	Tsuga canadensis / Canadian Hemlock
181	Pinus strobus / Eastern White Pine	209	Tulipa spp. cv. / Tulip
182	Pinus sylvestris / Scotch Pine	210	Verbena x hybrida cv. / Garden Verbena
183	Pinus thunbergiana / Japanese Black Pine	211	Viburnum x burkwoodii / Burkwood Viburnum
184	Platanus x acerifolia / London Planetree	212	Viburnum trilobum / American Cranberrybush Viburnum
185	Poa pratensis cv Kentucky Bluegrass	213	Vinca minor cv. / Periwinkle
186	Podocarpus macrophyllus / Southern Yew	214	Viola x wittrockiana cv. / Pansy
187	Potentilla fruticosa cv. / Shrubby Cinquefoil	215	Wisteria sinensis cv. / Chinese Wisteria
188	Prunus laurocerasus cv. / Cherry Laurel	216	Yucca filamentosa / Adam's Needle
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		

Nursery Landscape Pests and Disorders Identification

No. Item Name	No. Item Name
<p>Pests</p> <p>217 Aphid 218 Bagworm 219 Borer 220 Leafhopper 221 Leaf Miner 222 Scale 223 Spider Mite 224 Snail/Slug 225 Whitefly 226 White Grub</p> <p>Diseases</p> <p>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</p>	<p>Weeds</p> <p>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</p> <p>Physiological Problems</p> <p>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</p> <p>Beneficial Insects</p> <p>255 Praying Mantis 256 Lady Beetle 257 Paper Wasp 258 Lacewing 259 Spider</p>

Nursery Landscape Equipment and Supplies Identification

No. Item Name	No. Item Name	No. Item Name
<p>260 anvil-and-blade pruner 261 ball cart (B&B truck) 262 bark mulch 263 bow saw 264 broadcast (cyclone) spreader 265 bubbler head, irrigation 266 bulb planter 267 bunker rake 268 burlap 269 compressed air sprayer 270 core aerifier 271 chain saw 272 cut-off machine 273 drip emitter, irrigation 274 dry-lock wall block 275 edger (power or hand) 276 edging 277 erosion netting 278 fertilizer injector 279 fertilizer tablet 280 garden (spading) fork 281 garden (bow) rake 282 grafting band 283 grafting knife 284 granular fertilizer 285 gravity (drop) spreader</p>	<p>286 ground/pelleted limestone 287 hedge shears 288 hoe 289 hook-and-blade pruners 290 hose-end repair fitting 291 hose-end sprayer 292 hose-end washer 293 hose repair coupling 294 impact sprinkler 295 irrigation ring tool 296 landscape fabric 297 leaf rake 298 loppers 299 mattock 300 measuring wheel 301 mist nozzle (mist bed) 302 mower blade balancer 303 nursery container 304 oscillating sprinkler 305 peat moss 306 pick axe 307 planting/earth/soil auger 308 pole pruner 309 polyethylene pipe 310 pop-up irrigation head 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</p>	<p>318 quick coupler 319 quick coupler head adapter 320 reel mower 321 resin-coated fertilizer 322 rotary mower 323 rototiller 324 round point shovel 325 scoop shovel 326 shade fabric 327 sharpening stone 328 siphon proportioner 329 soaker hose 330 soil sampling tube 331 solenoid valve 332 spade 333 sphagnum moss 334 square point (flat) shovel 335 string trimmer 336 thatch rake 337 tree caliper 338 tree wrap 339 trowel 340 vertical mower 341 water breaker 342 wire tree basket</p>

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	
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VERBAL CUSTOMER ASSISTANCE PRACTICUM SCORE SHEET

Name _____ Chapter _____

	Possible Points	Member Score
<i>Conversation: (40 points possible)</i>		
Approach <ul style="list-style-type: none"> • Effective Greeting and offers to help. • Positive, Enthusiastic and not hesitant. 	4	
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	
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POTTING NURSERY STOCK PRACTICUM SCORECARD

Name _____ Chapter _____

	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	5	
<ul style="list-style-type: none"> • Uniform size and placement • Cutting stable in media 		
<i>Questions (6 points)</i>		
Response to Questions	6	
Total Points	50	