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FFA makes a positive difference in the lives of students by developing their potential for **premier leadership, personal growth and career success** through agricultural education. National FFA Online, www.ffa.org, FFA's Internet web site, can provide information about the National FFA Organization.

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GENERAL INFORMATION

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The National FFA Career Development Events are educational activities organized by the National FFA Organization and sponsored through the National FFA Foundation and special industry sponsors.

This is your copy of the official rules and regulations for National FFA Career Development Events for 2006–2010. Please retain this manual throughout the five-year period. Refer to the Local Program Resource CD-ROM or FFA online for the most up-to-date edition of the Career Development Event Handbook.

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Agricultural Mechanics	Dr. Stephen Poe	523-317-6418	spoe@ag.arizona.edu
Agricultural Sales	Mr. Troy Selman	936-661-9195	TLselman@gmail.com
Agronomy	Mr. Harold Brown	614-836-7694	hbrown@synagro.com
Creed Speaking	Mr. Greg Beard	805-756-2402	gbeard@calpoly.edu
Dairy Cattle Evaluation	Mr. Jim Ertl	651-582-8347	jim.ertl@state.mn.us
Dairy Cattle Handlers' Activity	Ron Tilford	513-293-4180	rtilford2@cinci.rr.com
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Environmental and Natural Resources	Mr. Billy Sumrall	601-785-9602	glbbeef@bellsouth.net
Extemporaneous Public Speaking	Mr. Dennis Wallace	360-458-6543	dennis_wallace@ycs.wednet.edu
Farm Business Management	Dr. James Casey	318-342-1750	jcasey@ulm.edu
Floriculture	Mr. David Kercheval	254-854-2952	KerchBar3@aol.com
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Forestry	Mr. Marion Fletcher	501-682-2561	marion.fletcher@arkansas.gov
Horse Evaluation	Mr. Joe Cunningham	918-479-6221	jcunningham@lg.k12.ok.us
Job Interview	Ms. Linda Story	270-733-4173	ljstory@bellsouth.net
Livestock Evaluation	Dr. Fred Rayfield	229-896-2293	frayfield@cook.k12.ga.us
Marketing Plan	Mr. John Jeans	503-999-6914	jjeans@astoria.k12.or.us
Meats Evaluation and Technology	Dr. Randy Harp	254-968-9212	harp@tarleton.edu
Nursery/Landscape	Dr. Alan McDaniel	540-231-5781	alanmcd@vt.edu
Parliamentary Procedure	Dr. James Connors	614-292-3386	connors.49@osu.edu
Poultry Evaluation	Dr. Jason Emmert	479-575-3595	jemmert@uark.edu
Prepared Public Speaking	Mr. Dustin DeVries	703-727-9866	ddevries@falconpro.net

PHILOSOPHY FOR NATIONAL FFA CAREER DEVELOPMENT EVENTS

Students are important customers of agricultural education and FFA who recognize quality and value in products and activities. When provided an opportunity to fashion their educational experiences, they generally make wise decisions based on needs. Perceptions, images and opinions of others influence students. They value change based on their perceived personal needs as well as the needs of others. They sometimes value change for the sake of variety. Adults are concerned about the experiences of students and want to help organize experiences that will meet the future needs of students while accomplishing the purposes of agricultural education and the National FFA Organization. The National FFA Organization should assume the leadership role in developing and continuously improving relevant FFA career development events. Although the National FFA Organization should be aware of the needs of state associations and should react to those needs, it should help initiate opportunities that reflect relevant and emerging technology. National FFA Career Development Events should be developed with significant input from FFA members, teachers, partners, respective industry sponsors and others involved in agricultural education.

National career development events should reflect instruction that currently takes place in the entire agricultural education program, including classroom instruction, laboratory instruction, individualized instruction, and/or supervised agricultural experience. However, it is appropriate for the national organization to develop career development events and awards that stimulate instruction in emerging areas that reflect both current and future community, national and global work force needs. The authority for insuring the relevance of an FFA

activity is ultimately vested in the National FFA Board of Directors.

The national organization should promote career development events. Career development events that include team activities should be based on cooperation and teamwork while recognizing the value of competition and individual achievement. The role of career development events is to motivate students and encourage leadership, personal growth, citizenship and career development.

Students should be recognized for achievement in career development events. Quality standards should be used as a basis for achievement. The national organization should ensure that the recognition is appropriate and meaningful. Recognition for achievement should be reflective of the total effort required by the chapter/team/individual and should take place at all levels of participation.

The National FFA Organization shall encourage accessibility and provide opportunities for achievement and recognition for students with diverse backgrounds. High expectations should be consistently communicated to those who are involved in career development events and awards.

GENERAL RULES AND OFFICIAL POLICIES

Violations of any of the following rules may be grounds for the event superintendent to disqualify the participants.

National FFA staff and event superintendents will use the published rules and procedures to organize and implement the National FFA Career Development Events. Event activities may not be conducted, modified or substituted due to lack of necessary materials, expertise or extreme impact to event budgets. Every effort will be taken to

maintain the quality and integrity of the event. In this case notification will be provided at the team orientation meeting. Teams that qualify to compete will be mailed the current format for the specific event in a team orientation packet prior to the convention for which they have qualified.

Team Activities

The primary goal of career development events is to develop individual responsibilities, foster teamwork and promote communications while recognizing the value of ethical competition and the value of individual achievement. Where appropriate team activities will be included that requires two or more members from one chapter working cooperatively. Career development events and awards are intended to be an outgrowth of instruction.

Career development events should:

- include problem solving and critical thinking.
- promote an appreciation for diversity by reducing barriers to participation.
- promote new directions and focus on future needs of members and society.
- include cooperative activities, where appropriate.
- encourage broad participation among members and recognize excellence within levels of experience.
- recognize individual and team achievement, develop general leadership and recognize levels of ability.
- provide local recognition for superior performance at the state and national level.

Eligibility of Participants

1. Each participant must be a current bona fide dues paying FFA member in good standing

with the local chapter, state FFA association and the National FFA Organization at the time of his/her certification and at the time of the national career development event in which he/she participates.

If the participant's name is not on the chapter's official roster for the years in which the dues were payable to the National FFA Organization, a past due membership processing fee of \$25, in addition to the dues must be paid **prior** to certification.

2. The participant, at the time of his/her certification as a national team member:
 - a. must be a *high school* FFA member, (a graduating senior is considered eligible to compete in state and national career development events up to and including his/her first national convention following graduation). (High school refers to grades 9–12.)
 - b. must have qualified as either a 7th, 8th or 9th grade member to compete in the creed speaking event.
 - c. while in school, must be enrolled in at least one agricultural education course during the school year and/or follow a planned course of study; either course must include a supervised agricultural experience program, the objective of which is preparation for an agricultural career.

The National FFA Constitution provides flexibility to meet the needs of students enrolled in non-traditional programs. For this purpose a student needs to be enrolled in at least one agricultural education course during the year they qualified for the event.
 - d. must have qualified as a state representative in a respective career development event; if he or she moves to a

different chapter or a different state, they may be allowed to compete in the national event with the school they qualified with during the qualifying year. Certification forms submitted to the national FFA will be the list that will be accepted.

3. A student may not participate more than once in the same official National FFA Career Development Event. No student may participate in more than one National FFA Career Development Event each year.
4. CDE participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.

Official Dress

1. Participants are expected to observe the National FFA Code of Ethics and the Proper Use of the FFA Jacket during the career development events. (Please see the latest edition of the Official FFA Manual.) Official dress is highly recommended for all participants where appropriate and is required for the awards presentation and recognition.

SELECTION AND CERTIFICATION OF STATE TEAMS

1. Each state team may be composed of four members except for agricultural communications, agricultural issues, marketing plan and parliamentary procedure. The members of a state team must be from the same chapter. Members must qualify in the career development event in which they are to participate at the national level. With extenuating circumstances a teacher may substitute another

student from the chapter who may not have participated at a state qualifying event.

2. Each team will be composed of the number of members determined by the specific event committee. See chart on next page for number of team members and number of scores used to comprise the team score.
3. Teams must be selected at a state or interstate career development event held between the immediate previous National FFA Career Development Event Convention and prior to the National FFA Convention in which they are participating. States that qualify more than one year out must request and submit a written waiver for approval at least 110 days prior to the national event.
4. Each state will submit a team declaration form by June 1st prior to the national FFA convention. A \$25 entry-processing fee will be charged for participation in each declared event with the exception of the Dairy Cattle Handlers' Activity. Processing fee must be paid in conjunction with certification of each team.
5. The state supervisor of agricultural education or the executive secretary must certify that participants are eligible. If an ineligible student participates in any career development event, the member will be disqualified and may result in the disqualification of the team as well.
6. All students must be certified by the designated deadline. Once original certification has been completed, no member may be added without first deleting a member.
7. Certification forms will be made available each year to the state supervisor of agricultural education and the executive secretary through the National FFA CDE website and National Agricultural Education Inservice CD-ROM. States must certify participants to the National FFA Organization 110 days

**OFFICIAL DRESS RECOMMENDATIONS, NUMBER OF PARTICIPANTS
AND NUMBER OF SCORES FOR TEAM TOTAL**

Event	Official Dress Appropriate	Number of Participants Allowed(per team)	Number of Scores for Team Total
Agricultural Communications	Yes	5	5
Agricultural Issues	Optional	3-7	Team Score Event
Agricultural Mechanics	No	4	Top 3 Scores
Agricultural Sales	Yes	4	4
Agronomy	Yes	4	4
Creed Speaking	Yes	1	N/A
Dairy Cattle	Yes	4	Top 3 Scores
Dairy Handler	Yes	1	N/A
Dairy Foods	Yes	4	Top 3 Scores
Environmental and Natural Resources	Yes	4	4
Extemporaneous Speaking	Yes	1	NA
Farm Business Management	Yes	4	Top 3 Scores
Floriculture	Yes	4	4
Food Science and Technology	Yes	4	4
Forestry	No	4	Top 3 Scores
Horse	Yes	4	Top 3 Scores
Job Interview	Yes	1	N/A
Livestock	Yes	4	Top 3 Scores
Marketing Plan	Yes	3	Team Score Event
Meats Evaluation and Technology	No	4	Top 3 Scores
Nursery/Landscape	Yes	4	Top 3 Scores
Parliamentary Procedure	Yes	6	Team Score Event
Poultry	Yes	4	Top 3 Scores
Prepared Speaking	Yes	1	N/A

prior to the start of the national convention. The names of all participants may be submitted after the 110 day certification deadline, but must be in the National FFA Center at least ten (10) business days prior to the career development event in which they are to participate. Any additions or deletions of participants less than ten (10) business days prior to the career development event must be done at the national FFA convention within one (1) hour prior to the time of each respective career development event team orientation meeting.

8. To certify at the convention, advisors are to complete an on-site add/delete form. Membership of those participants listed on the on-site add/delete form will be verified after the convention. If at that time, a member is found to be inactive, the team may be disqualified, if the member who is in question had an effect on the team placing. Regardless, the member in question will be disqualified. These participants must also meet all other requirements of eligibility printed in this handbook. When possible membership checks will be done at the time the on-site add/delete form is processed on site. If at this time the participant is not a member the chapter advisor will have the opportunity to pay membership processing fees, state dues and national dues.
9. Each member participating in a National FFA Career Development Event must submit the proper Waiver, Release of Liability and Consent to Medical Treatment Form. The form must be sent to the National FFA Center within 30 days prior to the event. If a team does not qualify for participation in the national event until after this deadline, the waiver form must be submitted with the certification form. Participants who do not submit this form will not be allowed to participate.

National FFA staff highly recommend that all liability waiver forms be submitted with the event certification form prior to the certification deadline. Liability waivers must be submitted with all add/delete forms.

Emergency Conditions

1. Under emergency conditions, a state team participating in a National FFA Career Development Event may be made up of less than the required members. States must still certify teams prior to the national FFA convention, but fewer than the required number could compete if an emergency condition such as illness, death in the family or an act of God would occur. Those individuals competing would still be eligible to qualify for individual awards.
2. Event committees will strive to divide teams into groups so that no two participants from a team will be in the same group. In any case no two members will be placed side-by-side.

Disqualification

1. Any communication, verbal or non-verbal, between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communication between team members during the team activity portion of a given career development event.
2. Teams or participants arriving after the career development event has begun may be disqualified or penalized.
3. Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.

4. Event superintendents may stop any participant if they deem their manner to be hazardous either to themselves or others. Such stoppage shall deem the individuals disqualified for that section of the career development event.
5. CDE participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.
6. Participants will not be allowed to utilize personal electronic communication devices, other than those approved by the event officials, during the entire course of the event. Participants who access personal electronic communication devices without prior approval of the event officials will be disqualified.
7. No team, participant, advisor or coach shall visit the event facilities from September 1 to the end of the event. Any team, participant, advisor or coach reported and proven to do so will cause the elimination or disqualification of that team from the national event.
8. Assess a penalty of 10% of the total points allotted for the written documents post-marked after the postmarked deadline in the following events; Agricultural Communications, Agricultural Issues, Job Interview, Marketing Plan and Prepared Public Speaking. If the document is still not received seven days after the postmarked deadline, the team/individual may be subject to disqualification.

Waiver of FFA Rules

Any local chapter seeking a waiver of a National FFA Board Policy or Procedure must submit in writing to the chapter's state FFA association office. If the request is approved at the state level,

it must be forwarded, under the signature of the state FFA advisor or executive secretary, to the national FFA advisor. After study by the appropriate staff, the waiver request must be submitted to the national FFA staff at least 30 days prior to the scheduled event or due date for which the waiver is requested. This policy does not supersede any current FFA policy for appeals already established for a particular FFA program.

Rules Committee of the National FFA Award, Recognition and Career Development Events Advisory Committee

1. The committee will meet only when needed at the national FFA convention and will make all final decisions on interpretation of the rules and regulations of the National FFA Career Development Events. The committee will be chaired by the National FFA Awards, Recognition and Career Development Events Advisory Committee chairperson who will in turn appoint a representative of each of the following organizations: National Association of Supervisors of Agricultural Education (NASAE), National Association of Agricultural Educators (NAAE) and the American Association for Agricultural Education, (AAAE). The program manager responsible for career development events will also serve. All five committee members will have one vote each.
2. The rules committee will resolve detailed written appeals associated only with scoring errors. Official judges' decisions are final. The announced results are the official results and awards may be duplicated as a result of the appeal. The written appeal must be filed with the education division staff responsible for career development events within seven (7) calendar days of the results announcement and accompanied with a \$50 filing fee. The fee will be returned if the appeal is justified.

Additional Operational Procedures and Policies

Check-in

Participants will report at the national FFA convention as indicated in the annual team orientation packet. Dates, hours and location will be sent annually to the state supervisor of agricultural education and to each team advisor in the team orientation packet. All participants will be given an identification number by which they will be designated throughout the event.

Assistants, Group Leaders and Officials

Each state agricultural education department is encouraged to provide staff and students to help administer and conduct specific National FFA Career Development Events. *States with prepared, extemporaneous and creed speaking participants must provide a judge.* States entering a team may recommend a person or persons to serve as an assistant in the career development event in which a team will participate. These persons may be supervisors, teacher educators, teachers of agriculture or other qualified individuals. A person designated as an assistant, group leader or official for a career development event must neither be the coach, advisor or agricultural instructor of a team/individual in that same career development event; nor shall they have had any direct part in training/coaching the team/individual in preparation for the event after qualification for nationals has occurred. If an individual wishes to train/coach their team/individual, they must excuse themselves from the committee and event preparation for that convention year.

Special Need

Accessibility for all students—All special needs requests and appropriate documentation as outlined in the special needs request procedure must be submitted with appropriate career

development event certification form by certification deadline. National FFA staff and the event superintendent will be responsible for scheduling assistance from a different state association to assist participants.

Scoring

Continuous revisions of scoring sheets, due to computer scoring, will be necessary. Copies of any revised sheets will be sent to the state supervisor/executive secretary of agricultural education 60 days prior to the career development event.

TEAM AND INDIVIDUAL AWARDS

The ranking of teams and individuals in each of the career development events will be on the basis of three logical groups within the total range of scores. These groups will be designated as gold emblem, silver emblem and bronze emblem. Teams and individuals participating in each of the career development events will be rated gold, silver and bronze emblem through a specific procedure that will be predetermined. However, officials will honor natural breaks in scores. In the final written announcement of results, teams and individuals will be ranked from top to bottom in the order of their placing. Awards will be distributed to the winning teams and individuals at award programs following the completion of the career development events.

1. All awards will be provided by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.
2. The team having the highest ranking in each career development event will receive an award and members will receive individual high team awards provided they are present at the time of the awards ceremony.

3. The high individual in each of the National FFA Career Development Events will be announced at the time the awards are distributed and presented with a special award.
4. Results of all National FFA Career Development Events will be released through the education division, National FFA Organization office at the appropriate event award ceremonies.

Career Development Event Scholarships

1. Scholarships may be awarded in the National FFA Career Development Events, *as funding is available*.

Scholarships will be held for a full year beyond the student's graduation date. If the scholarship is not requested within one year after graduation from high school, the scholarship will be forfeited. Information on availability of scholarships will be sent annually along with the "Program for National FFA Career Development Events" to state participating teams and state agricultural education officials. Only one career development event scholarship may be awarded per student per year.

2. Additional scholarships may be available to top FFA members who have participated in National FFA Career Development Events at local, state and/or national levels through the National FFA Collegiate Scholarship Program. Students must meet the criteria for each specific area as outlined in the national scholarship application and complete the application that is mailed to each chapter in order to be considered for these scholarships.
3. Farm Business Management Career Development Event Fellows Program is for the advisors of the top two National FFA Farm Business Management Career Development Event teams. The advisor of

the first place team will receive a \$1,500 award and the advisor of the 2nd place team will receive a \$1,000 award. The advisors may use the awards for **a)** in-service or continuing education **b)** farm business management instructional materials **c)** a scholarship fund for the local FFA chapter. The Fellows awards will be awarded on an "as available" basis. Fellows awards may only be awarded to a FFA advisor for a total lifetime amount of \$2,500. These awards are provided by the National FFA Organization through National FFA Foundation sponsorship by the career development event sponsor.

Written Tests

All written tests used in National FFA Career Development Events will be available for sale through the National FFA Catalog effective the January following each career development event. Please request Item NCQ (year).

Career Development Events Additions/Deletions

- a. National FFA staff in cooperation with the National FFA Board of Directors is expected to be proactive in developing new or initiating changes within existing career development events to ensure they meet the needs of FFA members.
- b. Three years following the initiation of a new career development event, 15 states should be participating and 26 states should be participating after the next three-year period in order to retain the event at the national level.
- c. In addition, if 15 state supervisors/executive secretaries develop a proposal for a new career development event, the national FFA staff will conduct a study for the validity of the career development event and make a recommendation to the National FFA Board of Directors. Representatives of these states

must be from each of the FFA regions. The same process may be used to eliminate a national career development event.

- d. The national organization will certify National FFA Career Development Event winners for international competition when states request, with the understanding that the state team will provide their own travel expenses.
- e. The National FFA Board of Directors and national officers shall approve all changes in the general plan, rules and methods of selecting winners.

NATIONAL FFA AWARD, RECOGNITION AND CAREER DEVELOPMENT EVENTS ADVISORY COMMITTEE

Purpose: To advise the National FFA Board of Directors on issues impacting both National FFA Career Development Events and Awards to ensure:

- 1. all activities are consistent with industry needs.
- 2. all activities are available to all members.
- 3. all activities are conducted openly, fairly and in a quality manner.
- 4. cooperation among various activities occurs, to the degree possible, to promote the interconnectedness of agriculture (i.e. forestry and agricultural mechanics or farm business management and dairy or livestock) and agricultural education (classroom, SAE, FFA).
- 5. new and innovative activities are being put forward for consideration.
- 6. as many students as possible have the opportunity to participate.

- 7. a constant process of local advisor in-service on proper use of these activities as tools for learning is being championed.
- 8. all activities are operated consistently with national FFA board policy.
- 9. activities are conducted within available budgets approved by the FFA board and, if appropriate, FFA foundation board.

Membership

- 1. Two members of the National FFA Board of Directors, selected by the board, one of which will be a state supervisor (preference may be given for the second position to be held by the teacher acting as the USDE representative).
- 2. Two members, who are agricultural education instructors, selected by National Association of Agricultural Educators, (NAAE) through a process of their choosing.
- 3. Two members, who are state staff, selected by National Association of Supervisors of Agricultural Education, (NASAE) through a process of their choosing.
- 4. Two members, who are teacher educators, selected by American Association of Agricultural Education, (AAAE) through a process of their choosing.
- 5. Two FFA members who are or were delegates selected by the FFA national officers through a process of their choosing.
- 6. One member who is a career development event superintendent selected by the CDE superintendents through a process of its choosing.

Consultants

The current superintendent of each FFA career development event area will serve as a consultant.

Term

Members serve a three-year term except for the two FFA member representatives who will serve a one-year term.

Chair

The chair of the national advisory committee on awards and career development events will be the state staff member selected by the National FFA Board of Directors.

Meeting Schedule

1. Annual national convention meeting will be held to report on the completion of activities at convention and provide input into the winter meeting agenda.
2. The annual winter meeting will allow for most of the committee's work to be conducted as a whole group and in sub-groups focused on specific issues or specific types of activities (e.g., team career development events, individual awards, chapter awards).

Costs for all official members and consultants:

- convention meeting cost is borne by each participant.
- the winter meeting cost will be borne by the National FFA Organization, education division budget and the National FFA Foundation special project budgets for career development events.

National FFA Career Development Event Committee Responsibilities

The National Career Development Event Committee should:

1. broadly represent agriculture teachers, agriculture educators, subject matter specialists and industry personnel.
2. be appointed/confirmed by the chief operating officer with authority to manage the team activities and events.
3. build on the principles of volunteerism and individual members should be recognized for their contributions.
4. elect a superintendent to a five-year term that is confirmed by the FFA chief operating officer.
5. develop and propose a three-year budget to be approved by the appropriate FFA staff subject for submission to the National FFA Board of Directors.
6. develop committee assignments cooperatively with FFA staff.
7. be structured to encourage member development within the committee and be sensitive to, and represent the needs of diverse populations and cultures.
8. be large enough to adequately manage the team activities.
9. be responsible for the identification of the number of teams eligible to participate at the national level. They should encourage equal opportunity for members of teams to participate from across the states.

Conflict of Interest

Any career development event committee member who has a team qualify for or choose to train a team that qualifies for national competition in the event related to their committee assignment shall excuse themselves from their committee duties and event preparation for that convention year to eliminate the conflict of interest. It is the committee member's responsibility to inform the event superintendent and national FFA staff of

their involvement with a team that has qualified for national competition. A person designated as an assistant, group leader or official for a career development event must neither be the coach, advisor or agricultural instructor of a team/individual in that same career development event; nor shall they have had any direct part in training/coaching the team/individual in preparation for the event, after qualification for nationals has occurred.

21 CHAPTER

NATIONAL FFA NURSERY/ LANDSCAPE

CAREER DEVELOPMENT EVENT

A Special Project of the National FFA Foundation

IMPORTANT NOTE

Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.

I. EVENT SCOPE

The Nursery/Landscape Career Development Event includes all aspects of the industry in producing, marketing, utilizing and maintaining landscape plants (woody and herbaceous plants and turf grasses), plus related products, equipment and services including landscape design.

II. EVENT PURPOSE

To stimulate career interest, encourage proficiency development and recognize excellence in students of nursery practices and landscaping through the agricultural education curriculum.

III. OBJECTIVES

PLANT MATERIALS — to demonstrate the ability to identify nursery and landscape plant materials and turf grasses commonly used in the United States.

PLANT DISORDERS — to demonstrate the ability to identify unhealthy plant conditions due to pests, nutritional or physiological disorders and mechanical or chemical injury.

CULTURAL PRACTICES— to demonstrate knowledge of the principles and skills involved in propagation, growth requirements, growing techniques, harvesting, marketing and maintenance of nursery plants and landscape turf.

DESIGN AND CONSTRUCTION— to demonstrate knowledge of the principles and techniques of landscape design and construction.

SUPPLIES AND EQUIPMENT— to demonstrate the ability to identify, select, use and maintain appropriate supplies and equipment for nursery and landscape operations, including equipment and procedures in mechanization and automation.

SAFETY— to demonstrate knowledge of safety practices in nursery and landscape operations.

INTERPERSONAL RELATIONS — to demonstrate skills in oral and written business communications.

MARKETING — to demonstrate understanding of marketing principles and proper sales and service skills.

RECORDS AND REPORTS— to demonstrate the ability to prepare accurate and legible records and reports and to interpret business documents.

IV. RULES OF THE EVENT

1. Under no circumstances will any participant be allowed to touch or handle plant materials or other specimens during the event except as expressly permitted in certain practicums.
2. Coaches may accompany participants to the event site but then must leave the area. At the conclusion of all event components, the superintendent will announce when participants and coaches may enter the competition area to review the materials and organization.

V. EVENT FORMAT

A. Equipment

Materials student must supply — Each participant must have the following individual tools: a clean clipboard, at least two No. 2 pencils, a ball-point or felt-tip pen, a calculator, a 12-inch ruler for use as a straightedge, an architect's scale and an engineer's scale. Calculators used in this event should be battery operated, non-programmable and silent with large keys and large displays. Calculators may have only these functions – addition, subtraction, multiplication, division, equals, percent, square root, +/- key and one memory register. No other calculators are allowed to be used

during the event. Additional items allowed but not required include the following: a circle template, a plastic block or stick eraser, a pocket-size dictionary or electronic speller, and a personal hand pruner or knife. Note that landscape symbol templates are not allowed.

B. Team Activity

Phase 1 — (50 points each + 100 team points)

This practicum involves the team members working together towards accomplishing an assignment. It is designed to evaluate individual and group contributions in coordination and cooperation of knowledge, evaluation and decision-making. The team activity has two parts, described below.

1. **Team Preparation** — The team members work as a group in evaluating a landscape or nursery business-type situation (production, service, personnel, or business operations or relations), as in the following examples:
 - a. A landscape plan (new or renovation) with a planting plan, hardscapes (patio, etc.) plan, irrigation system plan, and landscape maintenance plan, with each of the components evaluated to describe them verbally.
 - b. Two landscape plans of the same property to evaluate for making a verbal comparative description and recommendation on which plan is preferred by the team.
 - c. Preparation of a 4 × 5 inch newspaper advertisement (e.g., for the school paper promoting enrollment in the school nursery and landscape program).

The team will have 30 minutes for this preparation part. Notepaper and other supplies, including computer resources that may be appropriate for the situation

will be available. References will not be provided or needed for this preparation part. A judge will be observing and scoring during this time but not interacting with the team. If needed, the team may ask the judge basic questions about the assignment or materials provided.

2. **Team Presentation** — Each of the team members will make a verbal presentation to a judge based on decisions made during the preparation part. For the examples above this might be conducted as follows:
 - a. Each team member separately describes one of the plan components (plants, hardscapes, irrigation and maintenance).
 - b. Positive and negative qualities of Plan A are described by a team member, repeated for Plan B by another, the team recommendation is provided by the third, while the fourth serves as moderator.
 - c. Members separately discuss the audience characteristics, program features considered and selected for promotion, ad layout and ad timing.

The team will have 15 minutes for individual presentations and interaction with the judge. The presentation format is informal and conversational with all seated at a conference table, not a prepared visual-aid speech. Division of the time and organization of the presentations is at the team's discretion. The judge may ask questions of the presenter or other team members during this time. Information will be provided on the judge's role as business client, supervisor or other appropriate party to facilitate the dialogue.

Scoring criteria for the team preparation and presentation portions are given on the "Team Activity" scorecard. Individual components

from both phases have a value of 50 points added to the individual score, while the team components of both phases have a value of 100 points added to the composite team score.

C. Individual Activities

Phase 2 — General Knowledge Examination (150 points)

Fifty objective multiple-choice questions will be prepared on topics reflecting subject areas in the objectives. This phase will evaluate the participant's knowledge and understanding of basic horticultural principles in producing, marketing, using and maintaining landscape plants and turf. Participants are allowed 50 minutes to complete this phase. Each answer has a value of three points. Participants will record their answers on a scanning sheet.

Phase 3 — Identification of Plants, Pests, Disorders, Equipment and Supplies (150 points)

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

- Plant Materials
- Pests and Disorders
- Equipment and Supplies

Plants to identify will be presented as intact, live specimens. 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 rather than the plant.

Each specimen will be designated by a station number (1-50). 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 scanning sheet at the respective station number.

Each participant will be provided a copy of the list at the event site. Three points will be awarded for each correct identification, and participants have 50 minutes to complete this event phase.

No specimens or items may be touched or handled in any way.

Phase 4 — Landscape Estimating (100 points)

This practicum is designed to evaluate participant 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 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 20 objective questions about the landscape plan, and each correct answer has a value of five points. The questions may include 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. Fifty minutes will be allowed for this practicum. Participants will record their answers using a scanning sheet.

Phase 5 — Landscape Drawing (50 points)

This practicum is designed to evaluate participant knowledge of and ability in applying the tools of landscape design through preparation of a plan drawing. Written information about a property will be given, including such details as lot dimensions and orientation; house size and setbacks; size and location of paving, decking and fencing; and the location, size and type of plant materials to be included. This will be translated into a scale drawing on 8.5 x 11-inch grid paper provided. An objective score sheet specific to the assignment will be used by a judge to evaluate that all compo-

nents are included with appropriate size, location, symbol, and label, for a possible 50 points total. Participants will have 30 minutes to prepare the drawing. Allowed drawing aids are a straightedge, ruler or scale, and circle template along with the pencil, eraser, and calculator. Templates with landscape symbols are not allowed.

Phase 6 – 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) preparation of business documents 4) plant materials, plant culture and problems and garden center 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 a customer or client (the judge). Example situations might include, but are not limited to, the following individually or in combination:

Assistance with product purchase and use — from a selection of merchandise and related informational materials provided.

Disorder diagnosis and treatment recommendation — from a sample of the pest or symptoms, photograph, or verbal description (from the list in Phase 3) and selection of specimen labels from common retail-packaged garden chemicals.

Advice on plant selection or culture questions — from informational materials provided.

Assistance with a client complaint or problem — from personnel instructions and procedures provided.

Each participant will be located at a separated 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 and disorders presented will come from the current list for Phase 3. Tools and supply items, if not on the Phase 3 list, will be appropriately labeled for identification and use. Depending on the situation presented, preparation of a store order form may also be appropriate.

Seven minutes will be allowed for completion of this practicum. Scoring criteria are presented on the “Verbal Customer Assistance” score card, to be recorded by the judge.

Phase 7 — Written Customer Assistance (50 points)

This interpersonal relations practicum has the same objectives as in Phase 6 – Verbal Customer Assistance applied to written communication.

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 minutes will be allowed for this 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 8 — Nursery Production Practices (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.

Propagating Nursery Stock — Each participant will be furnished a stock plant, rooting flat and media, rooting powder, a hand pruner and a label and marking pen. (Personal 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. Seven minutes will be allowed for making and sticking up to 20 cuttings. An official will observe and score each participant during this practicum. Scoring criteria are presented on the “Propagating Nursery Stock” score card.

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. Seven minutes will be allowed for potting up to 10 containers. An official will observe and score each participant during this practicum. Scoring criteria are presented on the “Potting Nursery Stock” score card.

Phase 9 – Assessment and Solution (50 points)

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

Ten situations will be presented from the following four areas:

Measuring Nursery Stock — One nursery plant will be measured for market size (height, spread or caliper as appropriate) according to the American Standard for Nursery Stock for BR and B&B evergreen and deciduous trees and shrubs. A

caliper and measuring rule will be provided. Plants presented in containers will be assumed as growing in the field, and a label will advise on whether it is to be dug BR or B&B. Cut trunk sections may be presented for larger tree measurement.

Pruning Nursery Stock — One or more nursery plants will be displayed with points marked for possible pruning cuts. No plant will be actually pruned. Participants are to evaluate each labeled point and decide if the plant part should be pruned or not for improvement of the plant's health, form and overall quality. The answer choice then will be the combination of cuts that should be made.

Equipment Maintenance – Tools from the list in Phase 3, a part for a tool and/or an operating manual will be presented with answer choices of possible maintenance needs, corrective actions and/or operating specifications. Examples of possible choices are low oil, uneven height setting, blade needs sharpening, incorrect gas:oil ratio provided or replace broken handle.

Equipment will be placed to allow observing all components in the answer choices without handling the item. If handling should be required, allowance for this will be stated with that answer choice.

Problem Solving — Other situations of nursery and landscape plants, supplies or practices where observation and analysis of the subject and resource materials are involved in a decision-making process. Example situations may include the following:

- According to the sample label provided, a spill of this chemical must be handled by _____?
- From the information provided on these catalog pages, one bag of the designated medium will fill ___pots of the size and shape presented.

- According to the information provided, which plants in this list would likely need a protected site for winter survival in the Indianapolis, Indiana area?

Participants have 10 minutes to complete this phase. Each correct solution has a value of five points.

VI. SCORING

Participant scores are the sum of the nine individual phases of the event, and team scores are the sum of the three highest member scores plus the group portion of the team activity. Possible points are as follows:

Phase	Member	Team
1A. Team Activity – Individual . . .	.50 . . .	150
1B. Team Activity – Group		100
2. Examination . . . . .	.150 . . .	450
3. Identification . . . . .	.150 . . .	450
4. Landscape Estimating . . . . .	.100 . . .	300
5. Landscape Drawing . . . . .	.50 . . .	150
6. Verbal Customer Assistance . . .	.50 . . .	150
7. Written Customer Assistance . .	.50 . . .	150
8. Production Practices . . . . .	.50 . . .	150
9. Assessment and Solution . . . . .	.50 . . .	150
INDIVIDUAL TOTAL . . .	700 . . .	2100
TEAM TOTAL		2200

VII. TIEBREAKERS

If needed in the case of tied individual or team total scores, final placings will be determined by comparing, in order, scores for the following:

1. Phase 2 – Written Exam
2. Phase 3 – Identification Section
3. Phase 4 – Landscape Estimating
4. Phase 9 – Assessment & Solution

VIII. AWARDS

Awards will be presented at the awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.

In addition to the general awards of the career development events, the top three participants in the following two areas will be specially recognized:

Nursery/Landscape Knowledge and Principles — based on the composite score from Written Exam and Identification section.

Nursery/Landscape Applications — based on the composite score from the seven practicums from the following sections: Team Activity – Individual; Landscape Estimating; Landscape Drawing; Verbal Customer Assistance; Written Customer Assistance; Production Practices; Assessment and Solution.

IX. 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. However, multiple references for the plant materials may be desirable as no single source is comprehensive for the entire country or plant list. Other references than those listed may be equally valuable resources, along with the many video 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

Principles of Plant Science: Environmental Factors and Technology in Growing Plants. 2005. Dennis R. Decoteau. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0130163015

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. ISBN 097253430X

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 Ingels. Delmar Publishers Inc., Albany, NY. ISBN 1401834108

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

An Illustrated Guide to Landscape Design, Construction, and Management. 1998. Gregory M. Pierceall. Prentice-Hall, Inc., Englewood Cliffs, NJ. ISBN 0813430194

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

Ornamental 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. Wren 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

Math 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, 1999. Clifford R. House. 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

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/>

Special Note for State Events

No national listings of plant materials and disorders can match perfectly the industry situation in every state due to the wide range of environments across the U.S. Thus, the national event committee recommends that state event coordinators, wherever feasible, modify both sections of the list to serve better their industry and student educational needs.

NURSERY/LANDSCAPE PLANT IDENTIFICATION

Participant Name/Number _____

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

No.	Botanical Name/Common Name	No.	Botanical Name/Common Name
156	<i>Liquidambar styraciflua</i> / Sweet Gum	187	<i>Prunus laurocerasus</i> cv. / Cherry Laurel
157	<i>Liriodendron tulipifera</i> / Tuliptree	188	<i>Prunus serrulata</i> 'Kwanzan' / Kwanzan Japanese Flowering Cherry
158	<i>Liriope</i> spp. cv. / Lily-Turf	189	<i>Pyracantha coccinea</i> cv. / Firethorn
159	<i>Lobularia maritima</i> / Sweet Alyssum	190	<i>Quercus alba</i> / White Oak
160	<i>Lonicera japonica</i> 'Halliana' / Hall's Japanese Honeysuckle	191	<i>Quercus palustris</i> / Pin Oak
161	<i>Magnolia grandiflora</i> cv. / Southern Magnolia	192	<i>Quercus rubra</i> / Red Oak
162	<i>Magnolia x soulangiana</i> cv. / Chinese (Saucer) Magnolia	193	<i>Rhododendron x catawbiense</i> / Catawba Hybrid Rhododendron
163	<i>Mahonia aquifolia</i> cv. / Oregon Grape	194	<i>Rhododendron Hybrid</i> / Exbury Hybrid Azalea
164	<i>Malus</i> spp. and cv. / Flowering Crabapple	195	<i>Rosa</i> spp. Class Hybrid Tea cv. / Hybrid Tea Rose
165	<i>Myrica pensylvanica</i> / Bayberry	196	<i>Salvia nemorosa</i> cv. / Meadow Sage
166	<i>Nandina domestica</i> / Heavenly Bamboo	197	<i>Sedum spurium</i> cv. / Sedum
167	<i>Narcissus pseudonarcissus</i> cv. / Daffodil	198	<i>Solenostemon scutellarioides</i> / Coleus
168	<i>Nyssa sylvatica</i> / Sour (Black) Gum	199	<i>Sorbus aucuparia</i> / European Mountain Ash
169	<i>Pachysandra terminalis</i> / Japanese Spurge	200	<i>Spiraea x bumalda</i> / Bumalda Spirea
170	<i>Paeonia hybrid</i> cv. / Peony	201	<i>Syringa vulgaris</i> cv. / Common Lilac
171	<i>Parthenocissus tricuspidata</i> / Boston Ivy	202	<i>Tagetes</i> spp. cv. / Marigold
172	<i>Pelargonium x hortorum</i> cv. / Zonal Geranium	203	<i>Taxodium distichum</i> / Bald Cypress
173	<i>Pennisetum ruppelia</i> / Fountain Grass	204	<i>Taxus</i> spp. and cv. / Yew
174	<i>Petunia x hybrida</i> cv. / Petunia	205	<i>Thuja occidentalis</i> cv. / American Arborvitae
175	<i>Philodendron scandens oxycardium</i> / Heartleaf Philodendron	206	<i>Tilia cordata</i> / Littleleaf Linden
176	<i>Picea abies</i> / Norway Spruce	207	<i>Tsuga canadensis</i> / Canadian Hemlock
177	<i>Picea pungens</i> cv. / Colorado (Blue) Spruce	208	<i>Tulipa</i> spp. cv. / Tulip
178	<i>Pieris japonica</i> / Lily-of-the-Valley Bush	209	<i>Verbena x hybrida</i> cv. / Garden Verbena
179	<i>Pinus mugo</i> / Mugo Pine	210	<i>Viburnum x burkwoodii</i> / Burkwood Viburnum
180	<i>Pinus strobus</i> / Eastern White Pine	211	<i>Viburnum trilobum</i> / American Cranberrybush Viburnum
181	<i>Pinus sylvestris</i> / Scotch Pine	212	<i>Vinca minor</i> cv. / Periwinkle
182	<i>Pinus thunbergiana</i> / Japanese Black Pine	213	<i>Viola x wittrockiana</i> cv. / Pansy
183	<i>Platanus x acerifolia</i> / London Planetree	214	<i>Wisteria sinensis</i> cv. / Chinese Wisteria
184	<i>Poa pratensis</i> cv Kentucky Bluegrass	215	<i>Yucca filamentosa</i> / Adam's Needle
185	<i>Podocarpus macrophyllus</i> / Southern Yew	216	<i>Zinnia elegans</i> / Zinnia
186	<i>Potentilla fruticosa</i> cv. / Shrubby Cinquefoil		

NURSERY/LANDSCAPE PESTS AND DISORDERS IDENTIFICATION

No.	Item Name	No.	Item Name	No.	Item Name
Insects		230	Botrytis	244	Nutsedge
217	Aphid	231	Canker	245	Oxalis
218	Bagworm	232	Cedar-Apple Rust	246	Purslane
219	Borer	233	Crown Gall	247	White Clover
220	Leafhopper	234	Fireblight	Physiological Problems	
221	Leaf Miner	235	Powdery Mildew	248	Frost/Freeze Injury
222	Scale	236	Root Rot	249	Iron Deficiency
223	Spider Mite	Weeds		250	Leaf Scorch (drought/ winter burn)
224	Snail/Slug	237	Annual Bluegrass	251	Nitrogen Deficiency
225	Whitefly	238	Broadleaf Plantain	252	Pot-bound roots
226	White Grub	239	Buckhorn Plantain	253	String Trimmer Injury
Diseases		240	Chickweed	254	2,4-D Injury
227	Anthraxnose	241	Crabgrass		
228	Apple Scab	242	Dandelion		
229	Black Spot	243	Henbit		

NURSERY/LANDSCAPE EQUIPMENT AND SUPPLIES IDENTIFICATION

No.	Item Name	No.	Item Name	No.	Item Name
255	anvil-and-blade pruner	275	edger (power or hand)	294	hose-end repair fitting
256	architect's scale	276	edging	295	hose-end sprayer
257	ball cart (B&B truck)	277	engineer's scale	296	hose-end washer
258	bark mulch	278	erosion netting	297	hose repair coupling
259	bark medium	279	fertilizer tablet	298	impulse sprinkler
260	bow saw	280	galvanized pipe	299	landscape fabric
261	brick paver	281	garden (spading) fork	300	leaf rake
262	broadcast (cyclone) spreader	282	garden (bow) rake	301	loppers
263	bubbler head, irrigation	283	gas mask	302	mattock
264	bulb planter	284	grafting band	303	measuring wheel
265	burlap	285	grafting tool	304	mist nozzle (mist bed)
266	chaps	286	granular fertilizer	305	mower blade balancer
267	compressed air sprayer	287	gravity (drop) spreader	306	nursery container
268	core aerifier	288	grass shears	307	oscillating sprinkler
269	chain saw	289	ground/pelleted limestone	308	peat moss
270	cut-off machine	290	hearing protection	309	pick axe
271	drip emitter, irrigation	291	hedge shears	310	planting/earth/soil auger
272	dry-lock wall block	292	hoe	311	planting bar
273	duster	293	hook-and-blade pruners	312	pole pruner
274	dust mask			313	polyethylene film

No.	Item Name	No.	Item Name	No.	Item Name
314	polyethylene pipe	327	rototiller	342	square point (flat) shovel
315	pop-up irrigation head	328	round point shovel	343	string trimmer
316	post-hole digger	329	safety goggles	344	tape measure
317	power blower	330	sand	345	timeclock
318	power hedge trimmer	331	scoop shovel	346	topsoil
319	pot-in-pot units	332	shade fabric	347	tree caliper
320	propagation mat	333	sharpening stone	348	tree wrap
321	pruning saw	334	siphon proportioner	349	trowel
322	PVC (polyvinylchloride) pipe	335	soaker hose	350	T-square
323	reel mower	336	soil sampling tube	351	vermiculite
324	resin-coated fertilizer	337	solenoid valve	352	vertical mower
325	respirator	338	spade	353	water breaker
326	rotary mower	339	spark plug gap gauge	354	wire tree basket
		340	sphagnum moss		
		341	spray suit		

Nursery/Landscape

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

POTTING NURSERY STOCK PRACTICUM SCORECARD

	POSSIBLE POINTS	MEMBER SCORE
POTTING PROCESS (35 POINTS)		
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 • Plant remains stable 	10	
LABELING OF COMPLETED 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 	3	
POTTING PRODUCTIVITY (15 POINTS)_____		
NUMBER OF UNITS COMPLETED_____	10	
QUALITY OF UNITS COMPLETED_____		
<ul style="list-style-type: none"> • Overall quality and uniformity of lot 	5	
TOTAL POINTS (50 POINTS)		

Judge's Name

Judge's Signature/Date

Nursery/Landscape

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PROPAGATING NURSERY STOCK PRACTICUM SCORECARD

	POSSIBLE POINTS	MEMBER SCORE
PROPAGATION PROCESS (35 POINTS)		
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 	3	
POTTING PRODUCTIVITY (15 POINTS)		
NUMBER OF UNITS COMPLETED	10	
QUALITY OF UNITS COMPLETED		
<ul style="list-style-type: none"> • Uniform size and placement • Cuttings stable in media 	5	
Total Points	(50 points)	

Judge's Name

Judge's Signature/Date

Nursery/Landscape

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Member No.: _____

TEAM ACTIVITY SCORECARD

TEAM PREPARATION	INDIVIDUAL POSSIBLE SCORE	1	2	3	4	TEAM	ACTUAL TEAM SCORE
• Team leadership roles established/evident							(10)
• Project assignment and goal defined						(10)	
• Member responsibilities outlined and defined						(10)	
• Members effective in individual tasks	(10 pts each)						
• Members supportive of each other	(10 pts each)						
• Members interact in positive/constructive way	(10 pts each)						
Sub-Total (A)	(30 possible)						
• Agreement reached on individual evaluation						(10)	
• Presentation plan developed (who does what/when)						(10)	
Sub-Total (B)						(50)	
TEAM PRESENTATION	INDIVIDUAL POSSIBLE SCORE	1	2	3	4	TEAM	ACTUAL SCORE
• Positive voice, grammar, eye contact	(5 pts each)						
• Effective organization of information	(5 pts each)						
• Effective communication of information	(5 pts each)						
• Demonstrates knowledge of subject	(5 pts each)						
Sub-Total (C)	(20 possible)						
• Effective team interaction during presentations						(15)	
• Appropriate participation from each team member						(15)	
• Effective total team presentation						(10)	
• Team Assignments fulfilled						(10)	
Sub-Total (D)							
Total Team Member Points (A + C)	(50 possible)						

Judge's Name, section A & B

Signature/Date

Nursery/Landscape

Name: _____ Chapter: _____

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Member No.: _____

VERBAL CUSTOMER ASSISTANCE PRACTICUM SCORECARD

	POSSIBLE POINTS	MEMBER SCORE
CONVERSATION (35 POINTS)		
APPROACH		
<ul style="list-style-type: none"> • Effective greeting and offer to help • Positive, enthusiastic; not hesitant 	4	
PERSONALITY		
<ul style="list-style-type: none"> • Pleasant, friendly manner • Not pushy in selling 	7	
VOICE		
<ul style="list-style-type: none"> • Easy to hear and understand • Proper grammar used; good speaking form 	7	
INFORMATION REQUESTED FROM CUSTOMER		
<ul style="list-style-type: none"> • Determines assistance needs • Effectively ask details/preferences 	7	
SALESMANSHIP		
<ul style="list-style-type: none"> • Effective; tries to expand sale • Develops customer confidence in product/service 	7	
CLOSING		
<ul style="list-style-type: none"> • Repeats order, handles payment (as applicable) • Asks if instructions understood • Thank you close 	3	
PRODUCT/PROBLEM/PROCEDURE PRESENTATION * (15 POINTS)		
CORRECT PRODUCT/PROCEDURE/SELECTIONS	6	
CORRECT PRODUCT/PROBLEM INFORMATION PROVIDED	6	
CLARITY OF INFORMATION PROVIDED TO CUSTOMER	3	
Total Points	(50 points)	

* Includes, as applicable, evaluation of order form for completeness, spelling and arithmetic accuracy, clarity.

Judge's Name

Judge's Signature/Date

Nursery/Landscape

Name: _____ Chapter: _____

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Member No.: _____

WRITTEN CUSTOMER ASSISTANCE PRACTICUM SCORECARD

	POSSIBLE POINTS	MEMBER SCORE
<p>Customer Relations</p> <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	
<p>Business Letter Form</p> <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	
<p>Organization</p> <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	
<p>Technical Information</p> <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	
<p>Grammar/Punctuation</p> <ul style="list-style-type: none"> • Is the letter free of grammatical errors and misspelled words? 	10	
Total Score:	50	
<i>Deductions(i.e., Rules Infractions, Missing Content)</i>		()
Grand Total:		

Judge's Name

Judge's Signature/Date