



New Mexico FFA

Floriculture

FLORICULTURE CAREER DEVELOPMENT EVENT

2/12/2021

PURPOSE

To stimulate the study of and interest in production and retailing of flowers, plants and foliage through the agricultural education curriculum.

OBJECTIVES

- To be able to identify floriculture and bedding plant materials.
- To be able to identify and treat unhealthy plants due to pest, nutritional, mechanical or chemical injury.
- To be able to understand the biological and scientific principles and develop the skills underlying propagation, growth requirements, growing techniques, harvesting, marketing and maintenance of established floriculture plants.
- To be able to understand principles and develop skills of floral design.
- To be able to identify and select appropriate supplies and equipment for flower shop and greenhouse.
- To be able to understand and demonstrate the use of safety procedures and practices in floriculture operations.
- To be able to operate and maintain appropriate equipment for floriculture operations.
- To be able to understand and demonstrate interpersonal skills prerequisite to successful employment in the floriculture industry.
- To be able to understand and demonstrate proper sales and service skills.
- To be able to maintain records and proper reports that are accurate and legible.
- Effectively work together as a team.

COMMON CORE REFERENCES

7th Grade

CCSS.ELA-Literacy.W.7.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

8th Grade

CCSS.ELA-Literacy.SL.8.4 Present claims and findings, emphasizing salient points in a focused, coherent manner with relevant evidence, sound valid reasoning, and well-chosen details; use appropriate eye contact, adequate volume, and clear pronunciation.

9-10th Grade

HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.

10-12th Grade

CCSS.ELA-Literacy.RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

RULES AND PROCEDURES

- 1 A team representing a chapter will consist of four members. The three highest scoring members will count towards the team score.
- 2 The event will have four phases: identification of plant materials, job interview, and two practicums per team.
- 3 Under no circumstances will any participant be allowed to touch or handle plant material during the event except during the practicums.
- 4 Observers will not be permitted in the event area while the event is in progress.
- 5 Any communication between participants from the same team during the career development event will be sufficient cause for elimination of the team.
- 6 Any participant caught cheating during the career development event will be, along with his or her team members, expelled from the event.
- 7 All participants are expected to be prompt at their stations throughout the career development event. No provisions will be made for tardiness which will, in most cases cause late participants to lose event points.
- 8 Participants will be assigned to groups for the career development event. Each participant is to stay with his or her group throughout the duration of the event or until told to change by career development event officials.
- 9 To facilitate the holding of score cards during the career development event, each participant will be given a clear plastic clipboard. Also, all participants must bring their own pencils (a minimum of two No. 2 pencils).
- 10 All participants will be given a participant number by which they will be designated throughout the career development event.
- 11 Teams will be divided into groups so that no two or three participants from the same chapter will be in the same group.
- 12 Official Dress, not business attire, should be worn.

Event Format

MATERIALS STUDENTS NEED TO PROVIDE:

- * Two sharpened No. 2 pencils
- * Prepared resume
- * Floral cutters/clippers
- * Ribbon shears
- * Wire cutters
- * Participants may also bring an apron and/or a tool belt and towels.

Individual Activities

Phase 1 - IDENTIFICATION OF PLANT MATERIALS/EQUIPMENT (200 POINTS)

Forty specimens from the Floriculture Plant Identification List will be displayed for participants to identify by technical and common names. Each specimen will be designated by a number. Five points will be awarded for each specimen that is correctly identified. Each participant will be allowed 20 minutes to complete this phase of the event.

Phase 2 - General Knowledge Examination (100 POINTS)

Participants will answer 25 multiple choice questions that cover all areas of the floriculture industry cover in DelPrince (<https://www.g-w.com/principles-of-floral-design-2015>) This phase of the event will test participants' knowledge of understanding basic biological and scientific principle of producing and marketing flowers, plants and foliage. Each participant will be allowed 30 minutes to complete the exam. Each answer has a value of four points.

2023	Chapters 1-6
2024	Chapters 7-12
2025	Chapters 13-18

Phase 3 - PRACTICUMS (150 POINTS)

Each participant will complete two practicums selected from the list for the appropriate year. **(Each participant will provide his or her own florist shears, knife and pencil for this phase of the event.)**

2023

Make a Dish Garden
Pinching plants
Media selling
Plant potting / cutting

2024

Make a bud vase
Job Interview
One on One selling
Growing procedures - Pinching/Asexual/Potting
Identifying & Controlling Plant disorders

2025

Design a Corsage
Growing procedures - Pinching/Asexual/Potting

2026

Make a bud vase
Growing procedures - Pinching/Asexual/Potting

- 1 **Potting of Plant Cuttings (75 points - 10 minutes)**
Plant five rooted cuttings in the pot provided. (Each participant will be given 20 cuttings from which to select five; a 5 1/2 to 6 inch pot; a 1-1 soil mixture at correct moisture level; marking pencil.) Ten minutes will be allowed for completion of this practicum including the judging of the potted plant cuttings.
- 2 **Make a Dish Garden (75 points - 20 minutes)**
Each participant will make a \$25 dish garden. All plant materials, growing media and containers will be provided. Twenty minutes will be allowed for each participant to make his or her dish garden and to complete the itemized bill.
- 3 **Make a Product Display (75 points - 20 minutes)**
Each participant will set up a sales display of an item(s) commonly sold in florists shops or garden centers. Display areas will be established for each participant along with the product(s) to be displayed and all materials to establish the display. Twenty minutes will be allowed for completion of this practicum.
- 4 **Make and Package a Corsage (75 points - 20 minutes)**
Make and package a \$15 corsage. The type of corsage and information about the corsage will be announced by the event coordinator in charge at the beginning of the practicum. All plant and nonplant materials needed to construct and package the corsage will be provided. Participants should be knowledgeable and possess skills in the use of glue in making a corsage. Each participant will be allowed 20 minutes to complete the construction of the corsage and complete an itemized bill for the corsage constructed.
- 5 **Asexual Propagation of Plants (75 points - 10 minutes)**
Each participant will be provided the parent plant materials and all other materials needed to propagate plants asexually. Using the available materials, participants will take five cuttings from the plant before them and stick them in a rooting media. Ten minutes will be allowed for completion of this practicum including the judging of the participant's performance in completing the practicum.
- 6 **Make a Bud Vase (75 points - 20 minutes)**
Make and package a \$15 bud vase. The type of bud vase and information about the bud vase will be announced by the event coordinator in charge at the beginning of the practicum. All plant and nonplant materials needed to construct and package the bud vase will be provided. Participants should be knowledgeable and possess skills in the use of glue in making a bud vase. Each participant will be allowed 20 minutes to complete the construction of the bud vase and complete an itemized bill for the bud vase constructed.
- 7 **One - On - One Selling (75 points - 10 minutes)**
Each participant will assume the role of a sales person in a floriculture business (grower, florist shop, garden center, etc.) a customer (judge) with a specific need will approach the participant. The participant will help the customer meet his or her need by using sales skills. All supplies, information and the business setting in which the participant works will be provided. Ten minutes will be allowed for this practicum. Of the 10 minutes, participants will be allowed five minutes for dialogue with the customer and completion of the sales form. Judges will be allowed five minutes to score the participant. Scoring criteria are presented on the selling One-on-One Practicum Rubric, which will be recorded by a judge.

- 8 **Pinching Plants (75 points - 10 minutes)**
A plant will be placed before each participant. The participant will be given instructions as to what they are to do to the plant by the event coordinator in charge of the practicum. Participants will be judged on the procedures they followed in pinching the plant. Ten minutes will be allowed for completion and judging of this practicum.
- 9 **Handling a Hazardous Situation (75 points - 20 minutes)**
Each participant will be presented with a hazardous situation that could develop in a floriculture business. The participant will be evaluated on his or her understanding of the problem, procedures and practices followed in resolving the problem. Twenty minutes will be allowed for this practicum.
- 10 **Media Selling (75 points - 20 minutes)**
Each participant will develop either a one-page sales brochure or a newspaper advertisement. Information and all materials needed to develop the brochure or newspaper ad will be provided. Twenty minutes will be allowed for this practicum.
- 11 **Identifying and Controlling Plant Disorders (75 points - 20 minutes)**
Each participant will be given a plant with a nutritional, environmental, disease or insect disorder. If the disorder is nutritional or environmental, the participant will identify the disorder and prescribe treatment to the customer. If a disease or insect causes the disorder, the participant will prepare and apply a treatment for the disorder. Containers marked with specific chemicals or chemical products (will contain water colored to resemble the products) will be available for the participant to prepare their recommended treatments and apply them. In addition to the above points, participants will be judged on the safety practices they follow while completing this practicum. Safety materials and equipment will be provided to each participant.
- 12 **Handling a Customer Complaint (75 points - 10 minutes)**
Each participant will assume the role of an employee in a floriculture business (grower, flower shop, garden center, etc.). A customer or potential customer who has a complaint will approach the participant. The participant will work with the customer in working out his or her complaint.

Phase 3 - INTERVIEW FOR A JOB (100 POINTS)

Each participant will appear before an employer (judge) for the purpose of interviewing for a position available in the employer's business. Specific information about the job for which the participant is applying will be announced in the schools registration packer. Participants will be given two job descriptions along with application forms to complete. Participants will be allowed to choose the job they wish to interview for and prepare their applications prior to participating in the practicum. Each Participant will be allotted 20 minutes prior to their interview to complete the job application. Each participant will be expected to prepare, prior to the event, a resume of their experiences and background to present to the judge at the time of the interview. This resume should include actual experience and education of the participant. Ten minutes will be allowed for this practicum. Participants will be allowed five minutes to complete the interview and three minutes for judges to score the interview.

EMPLOYMENT LOCATIONS

1. Local Floral Shop

Position requirements and responsibilities:

Knowledge in basic floral design techniques, project construction and customer sales. Knowledge of cut flower care, material selection and product pricing would be valuable.

2. Technician Local Greenhouse / Nursery Outlet

Position requirements and responsibilities:

Basic plant care would include watering, fertilizing, transplanting, pesticide application and customer sales. Knowledge of fertilization calculation, tree measurement, growing medias, pinching and preparation of plants for shipment would be an asset. Experience with small gas engine equipment operation and maintenance would be needed.

3. Chain Store - Garden Outlet

Position requirements and responsibilities:

Identification of bedding, house and nursery plants would be essential. Knowledge of design of indoor scaping and outdoor landscape would be needed. Plant handling, product display and sales would be daily responsibilities.

4. Plant Care Service

Position requirements and responsibilities:

A driver's license would be required. Basic knowledge of house plant care, watering and fertilization would be necessary. Identification of common plant pests and proper treatment would be a daily task. Knowledge of indoor scaping techniques would be a necessity.

5. Organic Greenhouse

Position requirements and responsibilities:

Basic knowledge of organic gardening and greenhouse practices would be required. Daily tasks would include: watering, pinching and preparation of plants for shipment. Knowledge in methods of organic pest control would be helpful.

6. Hobby Supply Chain

Position requirements and responsibilities:

Basic knowledge of floral design using artificial products would be a requirement. Experience in holiday display would be very valuable. A background in color coordination would definitely be considered an employability skill.

7. Local Rose Farm

Position requirements and responsibilities:

Knowledge of fertilization, irrigation, pest control and growing medias as would pertain to rose production is essential. Pruning, packing and shipping experience would be helpful.

8. Local High School Greenhouse Summer Caretaker

Position requirements and responsibilities:

Duties would include customer sales and basic plant care which entails watering, fertilizing, transplanting and pesticide application. Knowledge of fertilization calculation, growing medias and pinching of plants would be needed. Experience with small gas engine equipment operation and maintenance would be necessary. The ability to maintain and repair the greenhouse and control systems would be very valuable.

Team Activity (400 Points)

Each team will perform an assignment routinely performed in some phase of the floriculture industry that requires teamwork. Prior to the event, the event coordinator will select a theme and series for floriculture industry assignments that span the breadth of the industry from production to design. These tasks will be described in situational terms for presentation to each team. Forty-five minutes will be allowed for completing the activity. there will be an additional fifteen minutes for preparation and clean up. All materials needed to complete the assignment will be provided.

The type of assignments that may be used in this phase of the event include, but are not limited to, the following:

- Prepare floral products for an event.
- Prepare and pack floral products for shipping and updating inventory.
- Create a floral product display.
- Create a greenhouse production and task schedule to meet the needs of a given customer.

Scoring criteria for the team preparation and presentation are on the Team Activity Rubric, which will be recorded by a judge.

<u>Scoring</u>	<u>Possible Points</u>
Identification of Plant Materials	200
General Knowledge Examination	100
Practicums	150
Interview for a Job	100
Total Possible Individual Points	550
Team Activity Possible Points	400
	Max Team Score
Top 3 individual scores (1650 is max)	1650
Team Activity (400 is max)	400
Max Possible Team Score	2050

PLANT DISORDERS

Nutritional & Environmental Disorders

Cold temperature (freeze)
Cold water damage
Ethylene damage
Insufficient water damage
Iron deficiency
Nitrogen deficiency
Phosphorus deficiency

Diseases

Botrytis – Gray mold
Damping-off
Downy mildew
Leaf spot (Black)
Powdery mildew
Root rot
Rust
Stem rot
Tospovirus (INSV and TSWV)

Insects & Pests

Aphids
Fungus gnats
Leaf miner
Leafhopper
Mealybugs
Scale
Shore flies
Snails/Slugs
Spider mites
Thrips
Whiteflies

REFERENCES

- *All About Perennials*. 1981. Ortho Books. Chevron Chemical Company, 6001 Bolinger Canyon Road, San Ramon, CA 94583.
- *Color With Annuals*. 1987. Ortho Books. Chevron Chemical Company.
- *Arranging Cut Flowers*. 1985. Ortho Books. Chevron Chemical Company.
- *All About Growing Orchids*. 1988. Ortho Books. Chevron Chemical Company.
- *Controlling Lawn and Garden Insects*. 1987. Ortho Books. Chevron Chemical Company.
- *All About Houseplants*. 1982. Ortho Books. Chevron Chemical Company.
- *Gardening in Containers*. 1983. Ortho Books. Chevron Chemical Company.
- *The Ortho Problem-Solver*. 1984. Ortho Books. Chevron Chemical Company.
- *Complete Guide to Gardening*. 1979. Better Homes and Gardens, Meredith Corporation, Des Moines, Iowa.
- *Floral Design and Marketing*. 1988. Ohio Agricultural Education Curriculum Materials Service, The Ohio State University, Room 254, 2120 Fyffe Road, Columbus, OH 43210.
- *Hortus, Third*. 1977. LH Bailey Hortorium, The Macmillan Co., NY. (Latest authority on nomenclature.)
- *The Greenhouse Worker*, 2nd Ed. 1984. Peter J. Wotowiec, Ohio State University, 2120 Fyffe Road, Columbus, OH 43210.
- *The Retail Florist Business*, 4th Ed. 1983. Peter B. Pfahl, Interstate Publishers and Printers, Danville, IL.
- *Introduction to Floriculture*. 1980. Roy A. Larson, Academic Press, New York, NY.
- *Flower Shop Management*. Ohio State Curriculum Service, Ohio State University, 2120 Fyffe Road, Columbus, OH 43210.
- *American Style Flower Arranging*. Peter B. Pfahl and Elwood W. Kalin, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1982.
- *Ornamental Horticulture*. 1982. Gary L. McDaniel. Prentice-Hall Company, Reston, VA.