2024 Practicum Areas — Spring Career Development Events

2024 AGRICULTURAL SALES CDE

- Requires a four (4) member team.
- Attire Official Dress
- Written Exam 100 points
 - Twenty-five questions
- Individual Sales Activity 150 points
 - The Sales Call scorecard in the New Jersey FFA CDE Handbook will be used by the judge.
- Team Activity 175 points
 - o The Team Sales Situation scorecard in the New Jersey FFA CDE Handbook will be used by the judge.
- 2024 Product
 - Students will act as salespeople for Tuckahoe Turf Farms. They will strive to sell top quality sod and passing that standard to the third generation. For information on why Tuckahoe Turf is better turf, see https://ttfarms.com/.
 - Students will receive their customer profiles during the Team Activity.
- Notes
 - Students need to bring the following materials with them for the event:
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Clipboard
 - Two No. 2 Pencils
 - 1-inch binder containing the product information and any other information gathered by the participant

2024 AGRICULTURAL TECHNOLOGY AND MECHANICAL SYSTEMS CDE

- Requires a four (4) member team.
- Attire Please <u>DO NOT</u> allow students to wear official dress for the event. They will need to wear appropriate shop clothes and work shoes (long pants, boots, etc.); no sneakers, mesh, or open-toed shoes. Students who don't adhere to these rules will be disqualified.
- Written Exam 50 points
 - Twenty-five questions
- **Practicum Areas** Students will be evaluated in each of the five areas listed in the handbook. The specific activities occurring in each area will not be publicized prior to the event; however, the list of skills and competencies have been narrowed down for each area (see below).
 - Machinery/Equipment Systems Competencies
 - Identify parts and functions of hydraulic systems
 - Adjust and/or calibrate chemical application, seeding, fertilizing, harvesting, processing and materials handling machinery
 - Select tools and materials for specific repair jobs
 - Select and use appropriate safety equipment
 - Operation and interpretation of circuit diagrams and flowcharts for electrical, hydraulic, fuel, oil, cooling, intake and exhaust systems

Electrical Systems Competencies

- Use appropriate standards for agricultural applications, including the National Electrical Code (NEC), Electrical Testing Laboratory (ETL), Factory Mutual, Underwriters Laboratory (UL), Canadian Standard Association (CSA) and/or OSHA standards.
- Determine volt, amp and ohm relationships (Ohm's and other application laws).
- Select motors based upon type of application
- Interpret electric motor nameplate data

- Identify electric motors and motor parts
- Select appropriate wire sizes and protection devices for specific loads and lengths of circuits
- Read schematics and sketch wiring circuits

Compact Equipment Systems Competencies

- Interpret wiring diagrams/schematics
- Condcut equipment pre-operation inspection
- Perform recommended periodic service jobs (as found in operator's manuals)
- Use mearsuring tools and test instruments such as: Micrometer and telescoping gauges, dial indicator, compression tester, torque wrench, VOA (volt-ohm-amp) meter, DMM (digital multi-meter), timing devisces, tachomter and dynamometer for determining test procedures
- Test and service batteries, charging, lighting, warning and cranking systems

Environmental and Natural Resources Systems Competencies

- Conduct land surveying practices
- Select irrigation systems for specific conditions
- Select irrigation equipment and techniques
- Lay out grade stakes for cut/fills
- Use water-testing equipment
- Assemble turf irrigation equipment
- Install components of irrigation systems for specific applications

Structures Systems Competencies

- Determine the size, specifications and layout of building
- Develop a bill of materials
- Interpret plans and working drawings
- Select arc welding machines and accessories
- Read drawings and welding symbols
- Read metal working plans and prints
- Operate power tools such as nibblers, drills and saws
- Operate hand tools such as saws and files
- Cut and assemble plastic pipe
- Solder copper fittings, tubing and copper wire

General Cluster Skills

All competencies listed in the handbook

Safety

Students will be evaluated on safety at each practicum site.

Notes

- Components of the event will be outside rain or shine. Make sure students are prepared for the weather.
- Students need to bring the following materials with them for the event:
 - Safety glasses (see the handbook for specifications)
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Leather Work Gloves
 - Clipboard
 - Two No. 2 Pencils

2024 AGRONOMY CDE AND PRACTICUM AREAS

- Requires a four (4) member team.
- Attire Travel Official Dress (see handbook for explanation)
- Written Exam 240 points
 - Sixty questions

• Identification – 200 points

50 specimens to be identified from the weed and/or crop plants and/or seeds lists in the current
 2024 New Jersey FFA CDE Handbook

Soils – 200 points

o identify soil structures and/or analyze web soil survey

• Pest Management – 200 points

- Disorders 100 points
- o Insect identification 100 points

• Team Activity Written Component – 250 points

As a team, students will prepare a written statement in response to a scenario.

Notes

- Components of the event will be outside rain or shine. Make sure students are prepared for the weather.
- o Students need to bring the following materials with them for the event:
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Clipboard
 - Two No. 2 Pencils

2024 FLORICULTURE CDE AND PRACTICUM AREAS

- Requires a four (4) member team.
- Attire Offical Dress
- Identification of Plant Materials and Equipment 200 points
 - 40 plant specimens to be identified from the Plant ID and Equipment lists in the current 2024 New Jersey FFA CDE Handbook
- General Knowledge & Problem Solving Exam 250 points
 - o 20 General knowledge questions plus 5 problem solving questions will be combined into one exam.
- One Annual Practicum (worth 100 points)
 - Growing Procedures
- One Rotational Practicums from the following selection (each area is worth 75 points)
 - o Make a Mixed Planter Combination
 - Make and Package a Corsage
 - Handling a Hazardous Situation
- Team Activity 200 points NEW IN 2024
- Notes
 - Students need to bring the following materials with them for the event:
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Clipboard
 - Two No. 2 Pencils
 - Floral tools (wire cutters, floral cutters/clippers, ribbon shears, floral knife)

2024 Environmental and Natural Resources CDE and Practicum Areas

- Requires a four (4) member team.
- Attire Travel Official Dress (see handbook for explanation)
- Identification 100 points
 - 50 specimens to be identified from the identification lists in the current 2024 New Jersey FFA CDE Handbook
- Objective Written Exam 100 points
 - Fifty questions
- Two Practicums 100 points each

Two of the following will be conducted

- o GPS Locations
- o Soil Profile
- Waste Management

• Team Activity Written Statement - 200 points

 As a team, students will prepare a written statement in response to a prompt on the following topic: "Neonicotinoids – Use and Effects on Water Quality and Aquatic Ecosystem Functioning."

Notes

- Components of the event will be outside rain or shine. Make sure students are prepared for the weather
- Students need to bring the following materials with them for the event:
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Clipboard
 - Two No. 2 Pencils
 - GPS Unit (see handbook for specifications) Team members are NOT permitted to share
 GPS units between teammates or among any other contestants.

2024 Nursery Landscape CDE and Practicum Areas

- Requires a four (4) member team.
- Attire Travel Official Dress (see handbook for explanation)
- Identification of Plants, Pests, Disorders, Beneficial Insects, Equipment and Supplies 150 points
 - 25 specimens to be identified from the identification lists in the current 2024 New Jersey FFA CDE Handbook
- General Knowledge Exam 150 points
 - Fifty questions
- Landscape Estimating 100 points
 - A landscape drawing will be provided and students will be asked to answer multiple choice questions relating to the design.
- One Practicum 50 points

One of the following will be conducted

- o Verbal Customer Assistance
- Nursery Propagation or Potting
- Team Activity 100 points NEW IN 2024
 - Teams will complete three of the Team Skills Challenges listed in the current 2024 New Jersey FFA
 CDE Handbook.

Notes

- Components of the event will be outside rain or shine. Make sure students are prepared for the weather.
- Students need to bring the following materials with them for the event:
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Clipboard
 - Two No. 2 Pencils
 - Scale (architect and engineer)
 - Hand trowel
 - Hand purners

2024 VETERINARY SCIENCE CDE AND PRACTICUM AREAS

- Requires a four (4) member team.
- Attire
 - Students must wear either scrubs (top and bottom; solid color) or polo with slacks. All participants must wear closed toed, closed heel and flat shoes. No jewelry may be worn. This includes rings, bracelets, earrings and exposed body piercings. Wrist watches are permitted.
- Scenario
 - o All portions of the event will center around one of these scenario topics:
 - Vesicular lesion investigations in swine, bovine and equine
 - Small animall wellness visit

NEW FORMAT IN 2024

 Watch this video for an explanation of the new format https://ffa.app.box.com/s/818tit96sscu65kelffrcfja6kqg859g/file/1248362969158

• Individual Activities – 300 points

- Students will respond to questions presented in mini scenarios that relate to the overall topic.
 Questions can include the following:
 - Identification items to be identified from the identification lists in the current 2024 New Jersey FFA CDE Handbook
 - General Knowldege may include questions about behavior, diseas, medical records, medical terminiology, anatomy/physiology, body condition score, regulations, patient mananagement, facility management, practice management, genetics, nutrition or husbandry
 - Math Applications may include coversions, dose calculations dilutions, cost calculations and invoices
- Clinical Application Students will cycle through 2 practicums that related to the overall topic
 - One Handling/Restraining 30 points
 - One Clinical Procedure **50 points**
- Additional ID Students will identify additional items related to the clinical applications that are not part of the individual activities.
- Team Activity 200 points
 - Students will utilize the information they gathered from the scenario presented during the individual activities to complete the team activity. The team will have 40 minutes to respond to the prompts and finalize their findings.
- Notes
 - NO live animals will be used during the event.
 - Students need to bring the following materials with them for the event:
 - Non-programmable Calculator (cell phone calculators are not permitted)
 - Clipboard
 - Two No. 2 Pencils

PLEASE NOTE

All events will be using the updated 2024 New Jersey FFA Career Development Event rules, identification lists, score cards, etc. located on the State Activity Guide.

https://www.nj.gov/agriculture/ag_ed/ffa/activity/index.html

Visit the National FFA Website for the updated National FFA CDE Handbook.

https://www.ffa.org/participate/cde-lde/