



# PA FFA Turfgrass **Virtual** CDE



## Chairperson Information

<b>CDE Chairperson</b>	Kristen Althouse Co-Chair – Carson Letot Committee Member – Kelse Brown
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## Basic Virtual CDE/LDE Guidelines

<b>Event Type:</b> Individual & Team Divisions	<b># of Team Members:</b> 3-4 *3 scores count
<u>Individual Materials List</u> <ul style="list-style-type: none"> <li>● Computer with access to internet</li> <li>● Non-programmable calculator</li> <li>● Sharpened pencils or pens</li> </ul>	<u>Group Materials List</u> <ul style="list-style-type: none"> <li>● Nothing additional</li> </ul>
<u>Pre-Event CDE Expectations</u> <ul style="list-style-type: none"> <li>● All students with an interest in sports field or golf course management or other turfgrass related industry are encouraged to study and participate.</li> <li>● Review and study suggested resources</li> </ul>	

## Virtual CDE/LDE Rules

<b>CDE Component</b>	<b>Points</b>	<b>Component Description</b>	<b>Virtual Platform</b>
General Knowledge Exam	100	This part includes 100 comprehensive questions on turfgrass science and management.	Flexiquiz
Turfgrass Identification	12	Students will identify 12 cool season and warm season turfgrasses.	Flexiquiz
Turfgrass Weed Identification	13	Students will identify 13 broadleaf and grassy weeds.	Flexiquiz
Turfgrass Insect Identification	12	Students will identify 12 insects that affect cool season and warm season turfgrasses.	Flexiquiz
Turfgrass Malady Identification	18	Students will identify 18 biotic and abiotic damage to cool and warm season turfgrasses.	Flexiquiz

Presentation	75	Students will need to present solutions for a sports field management scenario. The scenario will be provided prior to the event (following the close of Registration) for preparation. Students who are in the Individual Division will present alone. Students who are part of a team competing in the Team Division will present together. This is the only portion of the event where team members will collaborate.	Zoom
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**Causes for Disqualification:** Under no circumstance may participants be allowed to utilize the web or any other resource for any part of this contest.

**Tie-breaker:** If necessary, the team with the higher score in the ID shall finish higher.

### **Resources**

Compendium of Turfgrass Diseases (*3rd Edition*) – Richard W. Smiley, Peter H. Dernoeden, and Bruce B. Clarke  
 Controlling Turfgrass Pests (*3rd Edition*) – Thomas W. Fermanian, Malcom C. Shurtleff, Roscoe Randell, Henry T. Wilkinson and Philip L. Nixon  
 Destructive Turfgrass Insects – Daniel A. Potter  
 Establishing and Maintaining the Natural Turf Athletic Field—Stephen T. Cockerham, Victor A. Gibeault, and Deborah B. Silva  
 Fundamentals of Turfgrass Management (*Fifth Edition*) – Nick Christians, Aaron Patton, Quincy Law  
 Handbook of Turfgrass Insects – Rick L. Brandenburg, Michael G. Villani  
 Managing Turfgrass Pests – Thomas L. Watschke, Peter H. Dernoeden and David J. Shetlar  
 Mathematics for the Green Industry: Essential Calculations for Horticulture and Landscape Professionals – Michael L. Agnew, Nancy H. Agnew, Nick Christians, Ann Marie VanDerZanden  
 Practical Drainage for Golf, Sportsturf, and Horticulture – Keith McIntyre and Bent Jakobsen.  
 Irrigation Design and Technical Guides – Hunter Industries - [https://www.hunterindustries.com/resource\\_guide/tech-and-education-guides](https://www.hunterindustries.com/resource_guide/tech-and-education-guides)  
 Sports Fields: Design, Construction and Maintenance, Second Edition - Jim Puhalla, Jeff Krans, and Mike Goatley  
 Turfgrass Management (*Ninth Edition*) – A.J. Turgeon  
 Turfgrass Soil Fertility and Chemical Problems – R.N. Carrow, D.V. Waddington, and Rieke