

Case Study Guide

Version 1.1

Table of Contents

- Overview..... 3**
- Case Study 1.....4**
 - Brief:..... 4
 - Grading:..... 5
- Case Study 2.....6**
 - Brief:..... 6
 - Grading:..... 7
- Case Study 3.....8**
 - Brief:..... 8
 - Grading:..... 9
- References..... 10**

Overview

The Case Study section of the Turfgrass Science Invitational is designed to test the reasoning and critical thinking skills of the participants in their preparation to demonstrate the higher level thinking needed to be successful in the golf course maintenance industry.

Case Study presentations should be carried out in an area that provides participants a safe space to communicate as a team, sketch out ideas, and rehearse a pitch to be presented to judges during the invitational. Group planning areas may be ideal for logistical considerations based on facility space availability. Individual areas for presentation to limit interference with other presenting teams should be a priority, and given that the space needs to only fit the team members and judges, small conference rooms may provide an ideal space for presenting and review.

- A. Participants will be given a prompt for one of the three available Case Study challenges that include:
 - a. Best Management Practices
 - b. Industry Challenges
 - c. Human Relations
- B. Participants will be given their Case Study challenge and be provided 30 minutes to plan their oral presentation of their response to the challenge.
- C. Teams will be escorted into a space for presentation and will be allowed 5 minutes to present their response to the challenge and the judges will be given 5 minutes to ask clarifying questions in response to the presentation.
- D. The judges will use the provided rubrics to evaluate the presentation and responses to the questions.
- E. Tie-breaking protocol will not be necessary given the Case Studies portion combining with the Practicums and Knowledge Check for an overall score.

Case Study 1

Brief:

Best Management Practices (100 points, 400 team points)

Students will develop a solution to a case study problem based on turfgrass facility-specific Best Management Practices (BMP's)

- Each team will be allowed 40 minutes to complete this phase (30 minutes of discussion and planning, 5 minutes for delivery, 5 minutes for questions).
- Participating teams will have access to supplies for capturing ideas and drawing out their plans for the presentation.
- All team members must participate in the delivery of the proposal.
- Delivery of the proposal will be carried out solely by oral presentation.

-Managing Moisture in the Mountains-

Wayne Harbour Golf Club is located in a sub-tropical rain forest in the mountains of Western North Carolina. Designed by a famous architect and recognized as an upscale, private club, Wayne Harbour GC is considered one of the greatest golf courses in the United States. They have a problem however that is beginning to catch up with the maintenance of the course...

The average rainfall in this area is between 80 and 100 inches annually. Heavy clay soils that drain poorly are found throughout the golf course and the original drainage system cannot handle the excessive annual rainfall that seems to be growing more excessive every year. Even small rain events require closing the golf course for extended periods of time. In such a wet climate, it is essential to improve the golf course for playability and turf health, as well as for the enjoyment of the members. A few of those members on the board responsible for chairing activities by the maintenance team have begun to talk about the excessive moisture gathering around the course and have suggested that a “change at the top” might be necessary.

Your challenge is to develop a 5-minute verbal proposal that outlines the primary challenge, a connection to modern agronomic best management practices, and a discussion illustrating an appropriate solution for the current drainage issues. Successful teams will provide a solution for the current challenge as well as future challenges that might arise based on the underlying environmental pressures.

Equipment Required:

- Large Post-It Sheets
- Markers

Grading:

Item	Superior Evidence of Success (5-4)	Satisfactory Evidence of Success (3-2)	Unsatisfactory Evidence of Success (1-0)	Multiplier	Points
Outline of Case	Team provides complete insight into process of pulling out the appropriate primary challenge	Team provides insight into process of pulling out the appropriate primary challenge	Team provides little insight into process of pulling out a challenge that may or may not be the primary challenge	x2	
Connection to Industry knowledge	Team is able to connect the challenge to multiple peer reviewed/industry recognized agronomic concepts	Team is able to connect the challenge to peer reviewed/industry recognized agronomic concepts	Team is unable to connect the challenge to any valid peer reviewed/industry recognized agronomic concepts	x2	
Discussion Development	Team is able to describe a concise and complete plan that addresses the primary agronomic challenge	Team is able to describe a plan that addresses the primary agronomic challenge	Team is unable to describe a plan that addresses the primary agronomic challenge and lacks focus/addresses an inappropriate challenge	x2	
Reflection on Case	Team answers post-presentation questions completely with clear indication of preparation	Team answers post-presentation questions adequately with some indication of preparation	Team fails to answer post-presentation questions adequately and there is no indication of preparation		
Professionalism	All team members participate in all phases of the planning and delivery. Presentation exhibits indication of experience with public speaking	Most team members participate in all phases of the planning and delivery. Presentation exhibits some experience with public speaking	Less than half of the team members participate in the planning and delivery. Presentation exhibits little experience with public speaking		
Total					

Case Study 2

Brief:

Industry Challenges (100 points, 400 team points)

Students will develop a solution to a case study problem based on a current challenge in the turfgrass industry.

- Each team will be allowed 40 minutes to complete this phase (30 minutes of discussion and planning, 5 minutes for delivery, 5 minutes for questions).
- Participating teams will have access to supplies for capturing ideas and drawing out their plans for the presentation.
- All team members must participate in the delivery of the proposal.
- Delivery of the proposal will be carried out solely by oral presentation.

-Saving Water next to the Sea-

Lemon Mountain Golf Course is one of the hidden gems of the golf-rich region of the central coast of California. Situated between thick groves of Cypress and Monterey Pine trees, the golf course is positioned as a buffer between forest ecosystems and the Pacific Ocean. While the local wildlife is free to live and hunt where they please, the golf course maintenance department is feeling constricted by growing regulation pressure...

The state of California has taken an aggressive position in protecting the species that call the forests home. The State Water Resources Control Board is both restricting water usage and incentivizing agricultural operations to limit irrigated acreage. Lemon Mountain has seen consistent play as an upscale resort course, but has been looking towards a strategy that breathes new life into the course as well as adheres to the new restrictions and incentives in place to become a sustainability leader in the region. Their goal is to reduce water usage by 25% and implement a multi-pronged approach to innovative management over the next decade.

Your challenge is to develop a 5-minute verbal proposal that outlines the primary challenge, a connection to modern issues in the turfgrass industry, and a discussion illustrating an appropriate solution for the management of water. Successful teams will provide a solution for the current challenge as well as future challenges that might arise based on the underlying environmental pressures.

Equipment Required:

- Large Post-It Sheets
- Markers

Grading:

Item	Superior Evidence of Success (5-4)	Satisfactory Evidence of Success (3-2)	Unsatisfactory Evidence of Success (1-0)	Multiplier	Points
Outline of Case	Team provides complete insight into process of pulling out the appropriate primary challenge	Team provides insight into process of pulling out the appropriate primary challenge	Team provides little insight into process of pulling out a challenge that may or may not be the primary challenge	x2	
Connection to Industry knowledge	Team is able to connect the challenge to multiple peer reviewed/industry recognized agronomic concepts	Team is able to connect the challenge to peer reviewed/industry recognized agronomic concepts	Team is unable to connect the challenge to any valid peer reviewed/industry recognized agronomic concepts	x2	
Discussion Development	Team is able to describe a concise and complete plan that addresses the primary agronomic challenge	Team is able to describe a plan that addresses the primary agronomic challenge	Team is unable to describe a plan that addresses the primary agronomic challenge and lacks focus/addresses an inappropriate challenge	x2	
Reflection on Case	Team answers post-presentation questions completely with clear indication of preparation	Team answers post-presentation questions adequately with some indication of preparation	Team fails to answer post-presentation questions adequately and there is no indication of preparation	x3	
Professionalism	All team members participate in all phases of the planning and delivery. Presentation exhibits indication of experience with public speaking	Most team members participate in all phases of the planning and delivery. Presentation exhibits some experience with public speaking	Less than half of the team members participate in the planning and delivery. Presentation exhibits little experience with public speaking		
Total					

Case Study 3

Brief:

Human Relations (100 points, 400 team points)

Students will develop a solution to a case study problem based on a human relations situation in the turfgrass industry.

- Each team will be allowed 40 minutes to complete this phase (30 minutes of discussion and planning, 5 minutes for delivery, 5 minutes for questions).
- Participating teams will have access to supplies for capturing ideas and drawing out their plans for the presentation.
- All team members must participate in the delivery of the proposal.
- Delivery of the proposal will be carried out solely by oral presentation.

-Building a Better Crew on the Plains-

Chiming Channel Golf Resort is a large golf destination with multiple golf courses, hotels, spas, restaurants, and nature trails. It has established itself as a destination resort and employs hundreds of individuals in the region; serving as a pillar of the local economy. In the last few years however, recruitment and retention of the maintenance crew has become a chief concern...

Over the last five years, CCGR has lost on average 35% of their seasonal crew new-hires within two weeks of starting. The Channel course has lost an assistant to a new position out-of-state, an AIT to a position out of the industry, and a mechanic to retirement. The equipment technician team has an average age of 59 years old and an internship posting for a position as intern on the Creek course has gone unfilled for the last year. With so much flux and turnover, training outcomes are not being met and between mounting equipment damage from operator error and low crew camaraderie, the Superintendents are beginning to worry that they might be down to half the crew they used to have within the next few years.

Your challenge is to develop a 5-minute verbal proposal that outlines the primary challenge, a connection to personnel management techniques, and a discussion illustrating an appropriate solution for the current personnel issues. Successful teams will provide a solution for the current challenge as well as future challenges that might arise based on the underlying personnel challenges.

Equipment Required:

- Large Post-It Sheets
- Markers

Grading:

Item	Superior Evidence of Success (5-4)	Satisfactory Evidence of Success (3-2)	Unsatisfactory Evidence of Success (1-0)	Multiplier	Points
Outline of Case	Team provides complete insight into process of pulling out the appropriate primary challenge	Team provides insight into process of pulling out the appropriate primary challenge	Team provides little insight into process of pulling out a challenge that may or may not be the primary challenge	x2	
Connection to Industry knowledge	Team is able to connect the challenge to multiple peer reviewed/industry recognized agronomic concepts	Team is able to connect the challenge to peer reviewed/industry recognized agronomic concepts	Team is unable to connect the challenge to any valid peer reviewed/industry recognized agronomic concepts	x2	
Discussion Development	Team is able to describe a concise and complete plan that addresses the primary agronomic challenge	Team is able to describe a plan that addresses the primary agronomic challenge	Team is unable to describe a plan that addresses the primary agronomic challenge and lacks focus/addresses an inappropriate challenge	x2	
Reflection on Case	Team answers post-presentation questions completely with clear indication of preparation	Team answers post-presentation questions adequately with some indication of preparation	Team fails to answer post-presentation questions adequately and there is no indication of preparation	x3	
Professionalism	All team members participate in all phases of the planning and delivery. Presentation exhibits indication of experience with public speaking	Most team members participate in all phases of the planning and delivery. Presentation exhibits some experience with public speaking	Less than half of the team members participate in the planning and delivery. Presentation exhibits little experience with public speaking		
Total					

References

- American Society of Golf Course Architects (2016). "Golf & Water: Case Studies in Water Stewardship." American Society of Golf Course Architects Foundation.
https://asgca.org/wp-content/uploads/2021/03/ASGCA_Water_Golf_Spreads_lores_FIN_AL2.pdf
- Hartsock, A. (2019). "Labor pains in golf course management." Course. Golf Course Management. GCSAA. <https://gcmonline.com/course/environment/news/golf-course-labor>
- Schefter, D. (2013). "Wade Hampton Can Hold its Water." U.S. Senior Amateur. USGA.
<https://www.usga.org/articles/2013/09/wade-hampton-can-hold-its-water-21474860235.html>