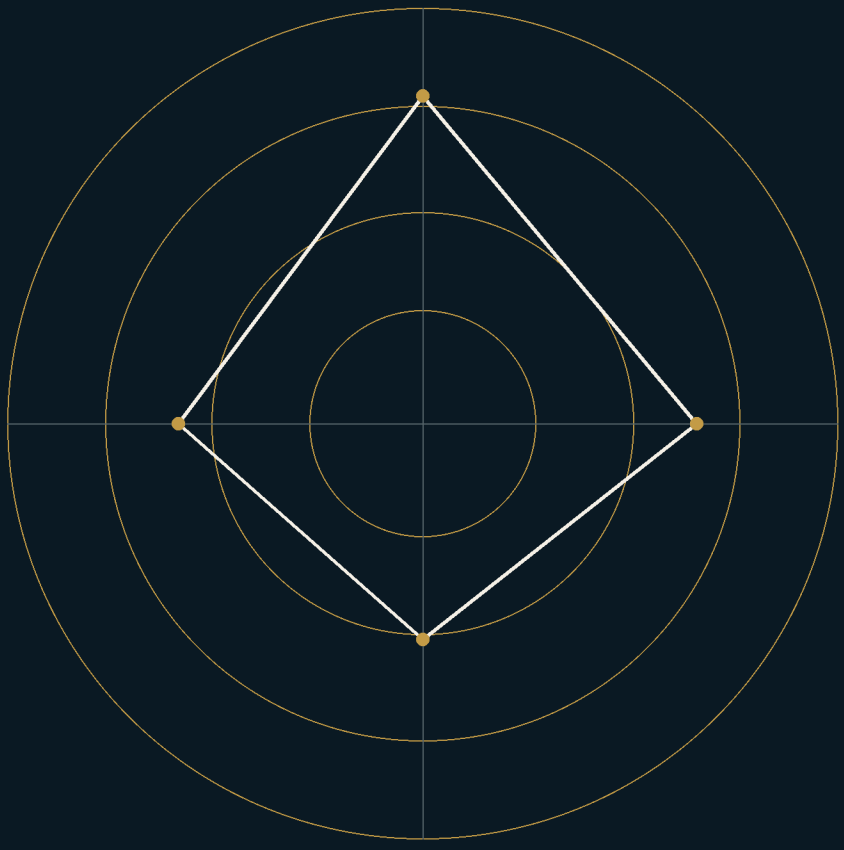
IUOAMC / CAMS

ACADEMIC AND APPLIED REFERENCE

# Culinary Adjudication Measurement Science

The Maadarani Dual-Measure Model

Ahmad Issam Maadarani



Worked equations · mind maps · practical laboratories

IUOAMC-CAMS-TEXTBOOK-2026-001

# Author’s Message

To judges, chefs and trainers,

This book begins with a practical question. When we score a dish, can the chef understand how we arrived at the result? Could another judge review the observation, the measurement and the conditions that led to the decision?

I developed CAMS to make scores explainable. Competitors should be able to understand what worked, what influenced their assessment and how the panel distinguished execution from serving conditions or differences in judgment. A panel should keep the records it needs to review its decision when new evidence emerges.

The Maadarani Dual-Measure Model assesses dish performance while examining how consistently the judgment was made. A judge can start in a single session by recording observations before discussion, linking them to a published criterion and identifying what should be measured again before changing the result.

Try the exercises on dishes you know. Record where observations differ and discuss what could explain the differences. This practice helps judges understand the dish and improve how they evaluate it.

## Ahmad Issam Maadarani

President General, International Union of Arab Master Chefs

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Worked datasets are fictional. Cited standards give methodological context, not endorsement.

# Introduction

Culinary Adjudication Measurement Science (CAMS) examines how sensory or technical observations become scores and how those scores can be reviewed. When two judges disagree, the difference may reflect variation between portions, serving temperature or differing interpretations of a criterion. Recording these factors allows a panel to investigate the result.

## What does the model measure?

The Maadarani Dual-Measure Model follows two lines of inquiry. The first describes the dish against a published scorecard. The second examines judging consistency through calibration, controlled repetition and comparison across the panel. The sample, judge, context and timing records connect the two.

## How to use this book

Start with the foundational units to learn the terms and build a scorecard. Continue with dish measurement, judge calibration and session design. In the applied guide, calculate the result from raw scores before reading the interpretation, then test how the result changes when an assumption changes. Trainers can use the recording sheets and rubrics for group practice.

## How to read the examples

Cases labelled as teaching examples use fictional data to explain the calculation and its interpretation. Record the conditions of each trial and preserve original scores when making corrections. In competition, follow the announced rules for missing scores, appeals and ties.

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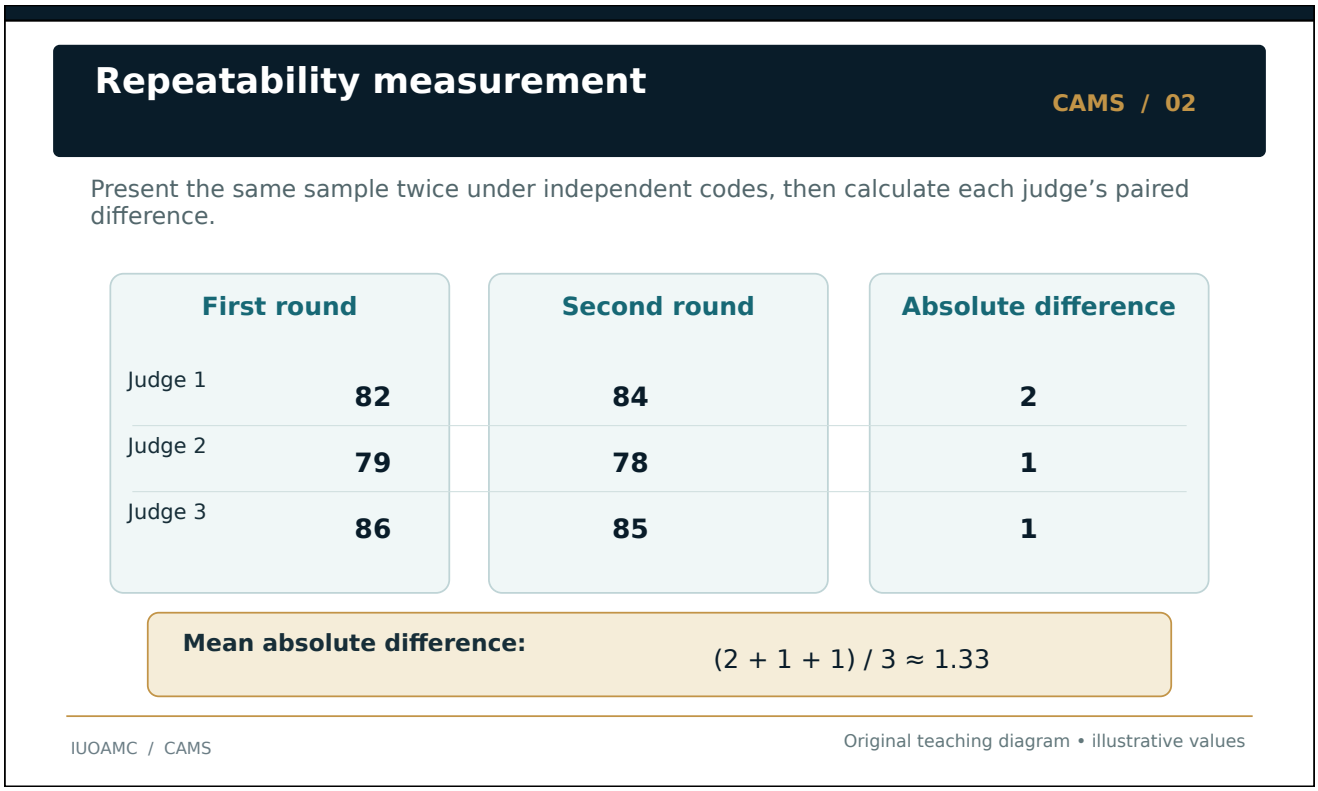
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ILLUSTRATED METHOD / FIGURE 02




## Hidden-repeat differences

The same sample is presented twice under independent codes. For the three fictional judges, absolute paired differences are 2, 1, and 1 points; their mean is 4/3, about 1.33 points. This statistic describes repeatability only for eligible equivalent portions. It does not establish accuracy against a reference or permit removal of a discordant pair without a prior rule.

APPLIED CASE · UNIT 47

# A measured service timeline

Illustrative teaching dataset. Before the round, the panel sets a maximum of three minutes from ready status to first bite. Two equivalent portions from one batch are ready at 12:00; B stays on the service platform six minutes longer than A.

| Portion | Ready | Handover | First bite | Total | At bite | Crunch /10 |
|---|---|---|---|---|---|---|
| A | 12:00 | 12:01 | 12:02 | 2 min | 68 °C | 8 |
| B | 12:00 | 12:07 | 12:08 | 8 min | 60 °C | 4 |

## Calculation and limits

**First-bite gap = 8 - 2 = 6 min; B exceeds the 3-min limit by 5 min.**

The observed crunch difference is four points. The handover timestamps locate most of the extra wait under service control. One pair does not establish that cooling alone caused the texture change. Retain both original closed cards and apply the predeclared eligibility or reservice rule.

This case is fictional. Keep the raw record and use the rule announced before the result.

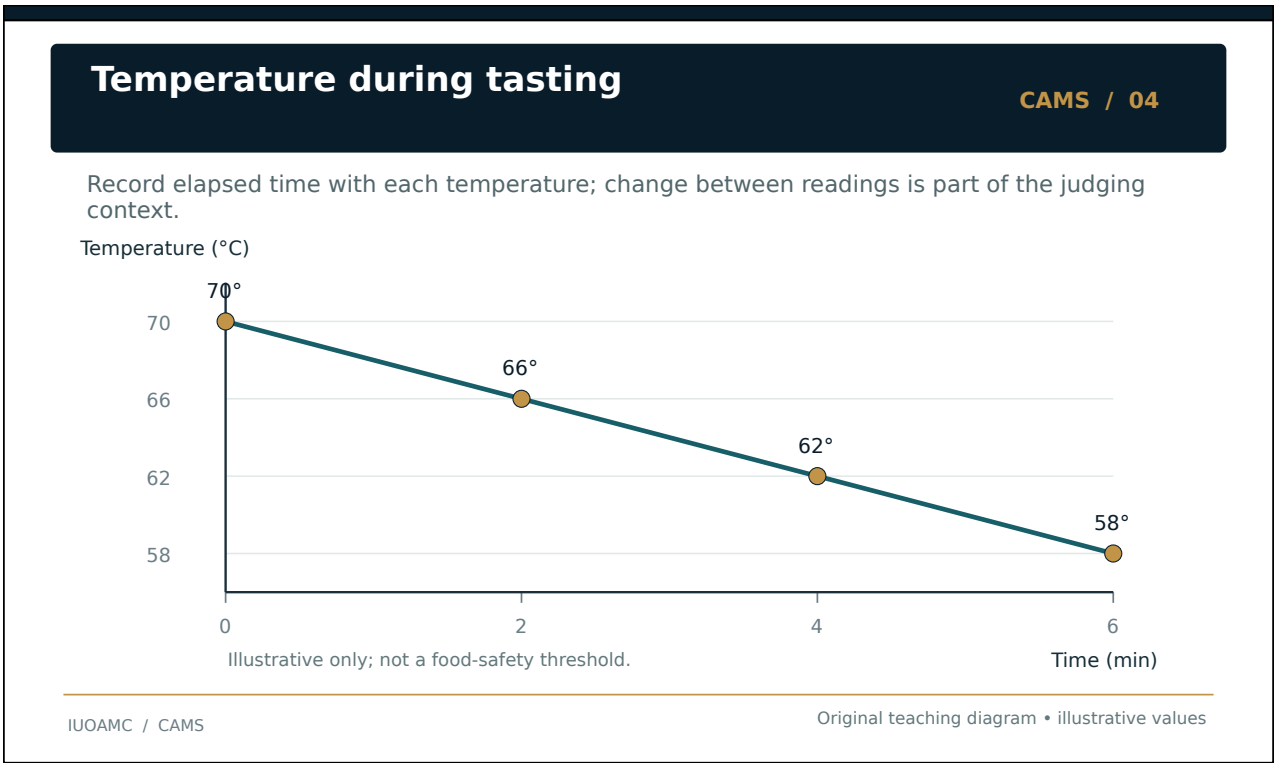



Figure 04 uses a separate illustrative 0–6 minute temperature series; it is not the two-portion dataset above.

APPLIED CASE · UNIT 72

# Balanced order with a failed thermal check

Illustrative teaching dataset. An independent coordinator holds the identity key. Each portion weighs 50 g, and an arrival window of 60–65 °C is declared before the round. The rotation places every dish once in each position.

| Judge | First | Second | Third |
|---|---|---|---|
| J1 | A | B | C |
| J2 | B | C | A |
| J3 | C | A | B |

## Calculation and limits

**Each code appears once in every column; order balance does not prove service equivalence.**

Suppose C for J2 arrives after seven minutes at 55 °C, while other portions arrive at 62–63 °C. Mark that portion as outside the thermal window and retain its original score. The coordinator compares weight, time and temperature for every position, then applies the previously published reservice or admission rule. A successful blind code cannot cancel a failed portion check.

This case is fictional. Keep the raw record and use the rule announced before the result.

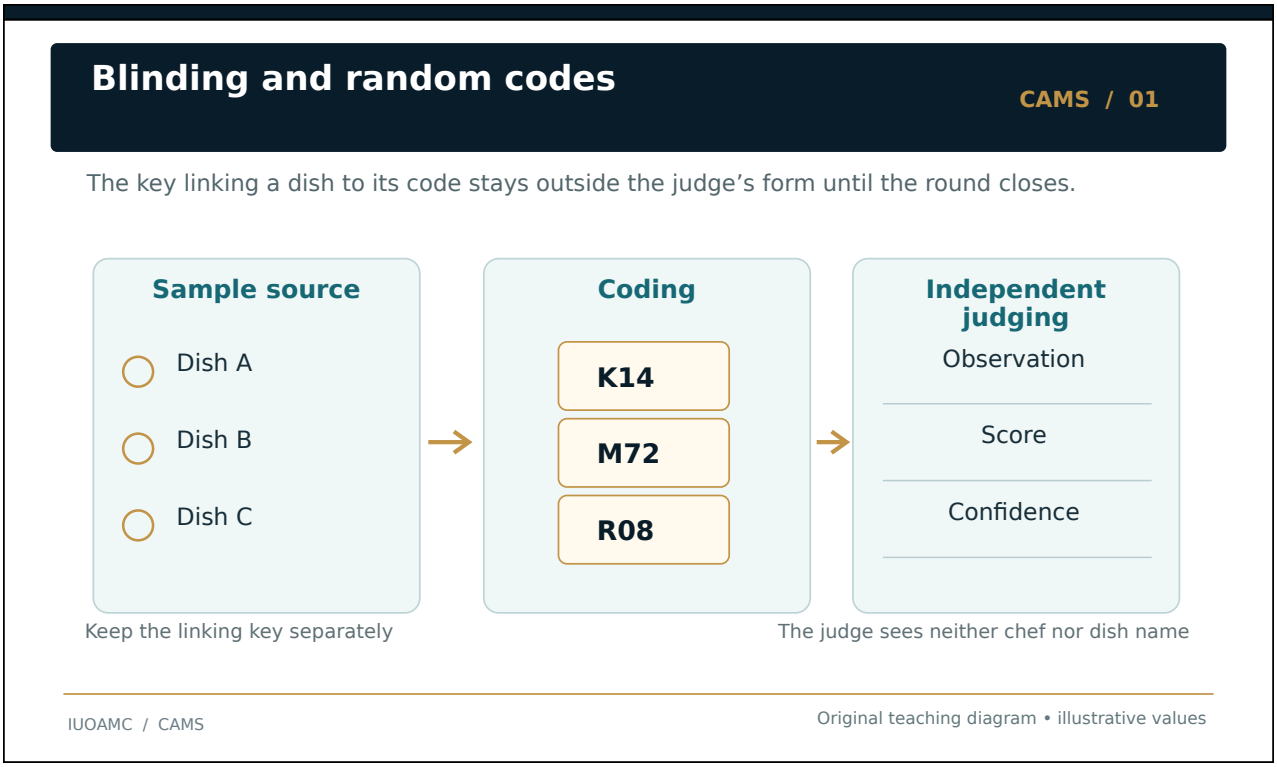
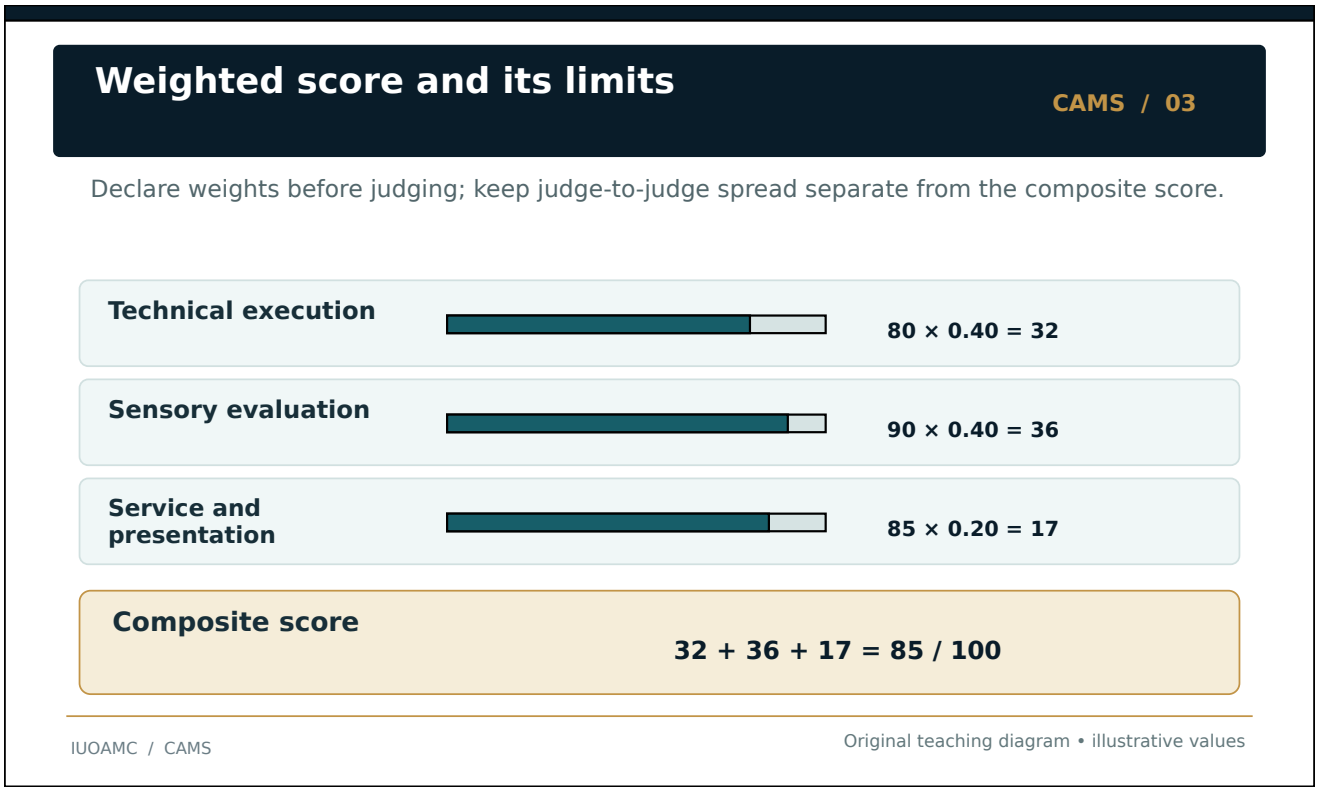



Figure 01 explains concealed codes; the rotation table above establishes position balance separately.

ILLUSTRATED METHOD / FIGURE 03




## A second weighted-score example

This figure uses three announced criterion weights: 40%, 40%, and 20%. The contributions 32, 36, and 17 add to 85/100. It is a separate worked example from the scorecard on the preceding page. The number does not itself describe agreement among judges; retain their individual cards and dispersion separately.

# How does a dish become a defensible decision?

CAMS connects observation, scoring, judge consistency and the conditions of service. Across 100 applied units, it gives panels a way to record what they sensed, reproduce calculations and examine a result when evidence changes.

Dish performance and technical execution

Judge calibration and controlled repeat tasting

Context, time and decision traceability

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Ahmad Issam Maadarani · IUOAMC