# Statistical Moderation Process

During marking, markers should enter categorical percent grades into the downloaded Gradesheet. After marking has been completed, the markers should upload their Gradesheets to the DLE.

The ML should reveal identities, and then download the Gradesheets again, along with the Gradesheet from the ‘hidden assignment’ which is used to return marks to UnitE.

The ML can then use the Rmd script to create a statistical moderation report and a file with moderated marks ready to upload to the DLE.

## How this works

The markers’ gradesheets must include the markers name in the **Marker** column , and should have been deanonymised (Release Names) as should the uploadable file.

The script converts the percent grades into linear equivalent values 1 (F-) to 15 (A+), ignoring zeroes and blanks, and then runs a oneway anova and Tukey HSD pairwise comparisons between markers.

A linear model is run on the linear equivalents, to find the markers’ differences from the overall mean. These differences are rounded to integers, and subtracted from their marks to move them towards the mean.

Finally the moderated marks are converted back into percent grades on the 17 to 100 scale.

The target file containing moderated marks for upload is saved in a subfolder called ‘moderated’.

## How to use the script

1. Doubleclick the Rmd file
2. In R Studio, click the Knit button and respond to the prompts
3. Check the report, and decide what to do – rerun the previous step and answer the prompts differently until satisfied.

## What next

Copy the ‘StatisticalModeration.doc’ to the Externals folder

Upload the combined moderated marks from the moderated/ subfolder to the assessment submission point.