

# Generating DWF grades

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## Instructions

Following instructions are to analyze DWF grades for following courses,

- MAT 112
- MAT 115
- MAT 120
- MAT 150
- MAT 151
- MAT 190
- MAT 191
- STA 108

offered by UNCG Mathematics and Statistics for the past 9 months starting from previous semester (or same semester if the analysis was carried out at the end of current semester). All required codes are available on github.

Follow the following steps to generate DWF grades for above courses:

- step1: Download the following **R** codes to a local folder in your desktop/laptop,
  1. GetResults.R
  2. GradesByCourse.R
  3. GradesOverall.R
- step 2: get the new data file (it will be a “.accdb” access file) and
  - save it as **GradesDistributions.accdb** in the same folder with R codes
- step 3: go to R/RStudio
  - open GetResults.R
  - execute the above code, (it will ask for a file location, then select the data file)

If everything works fine (hopefully) following outputs will be created,

- AdjGrades.csv
  - excel file with row data summarized at A, B, C, D, F, WF, W
- overall.pdf
  - overall grade distribution for all courses by semester
  - overall grade percentage
  - overall DWF percentage
  - overall DWF percentage by delivery method
- one pdf for each course (9)
  - DWF trend over the past 9 semesters
  - grade distribution
  - DWF percentage by delivery method

## Common issue and fixes

1. The data will be in “.accdb” format, only 32 bit version of **R** (in RStudio this can be changed from Global setting and will have to restart **R**) will work for the above codes.
2. If the data format was changes then code **GradesByCourse.R** line 15 may have to be changed accordingly (also the new packages if any).
3. If you are using a Microsoft Office version of 2010 or later, please install 2007 Office System Driver.
4. It was assumed that column names will not be changed over time if so you may have to rename it as per the codes (it might be a major modification to the codes).