Component I: Data Wrangling

Assessed in line with task requirements + course material & prior wrangling assignment

DATA-IM/EXPORT	**3 points**
proper import STUDENTS-YOURID.txt	1
proper import ITEMS-YOURID.txt	1
proper export to RDS of final dataset	1
CODE SYNTAX STRUCTURE	**5 points**
code runs from start to end	1
all required packages at front of syntax	1
readability: structure & comments	3
DATA AUDITING	**6 points**
Intentional search for anomalies	2
Finding & justified handling anomalies	4
DATA STRUCTURING	**5 points**
(long format)response as research unit	2
succesful merger STUDENTS & ITEMS	2
exact variable names & order	1
(ID REGION MREGION MSTUDENT ITEM C1 C2 C3 C4 Y)	
DATA COMPUTATION	**8 points**
MSTUDENT (mean bystudent)	2
MREGION (mean by region)	2
RESCORING FINALSTRINGOFZEROS to NA	2
Up to date computation	2
Logical: e.g. AFTER rescoring/anomaly handling	

Final Component Grade: E ≥ 13; D ≥ 15; C ≥ 18; B ≥ 21; A ≥ 24;

Downgraded by one full grade for case of using example dataset 622 instead of individual customized dataset. In absence of clear indications of cheating (or if so, done badly), leniency was applied, but keep in mind that this is not the default. Praise yourself lucky that this is your very first exam + COVID19 circumstances.

Component II: Data Visualization

Assessed based on Representation module course material.

Graphic inquisition subscore **11 points**

Source of figure	1
1- Gestalt principles & visual structure	2
2- Keep it simple: Decoding & Operations	2
3- Less is more: Chartjunk & data-ink ratio	2
4- Graphical data integrity & lie factor	2
5- Annotation & stand-alone readability	2

2 points per main theme that is discussed with proper supporting evidence;
Exact wording of themes is not essential as long as they are clearly implied;
Evidence is not counted for more than one theme (no double points);
Ambiguously formulated or unclear evidence is worth at most one point;

Graphic design subscore **19 points**

Apriori requirement: if not fulfilled, no score

Reproducible R script	1
Figure properties	1

(3 variables+panels/facets+not mere 4 data points)

Basic

Readable R script	1
APA compliance	1

(cf. Bold Figure next line italic title; Figure & below an optional note)

Design

1- Gestalt principles & visual structure	2	*(severe flaw = 0, OK'ish = 1, good = 2)*
2- Keep it simple: Decoding & Operations	2	
3- Less is more: Chartjunk & data-ink ratio	2	
4- Graphical data integrity & lie factor	2	
5- Annotation & stand-alone readability	2	
Argumentation for implemented design	2	
Does intended message come across?	3	

Final Component Grade: E ≥ 15; D ≥ 17; C ≥ 19; B ≥ 22; A ≥ 25;

Downgraded by one full grade for case of close-to plagiarism copypaste with tiny modification of given class example. Note that such leniency is not the default. Again, praise yourself lucky that this is your very first exam + COVID19 circumstances.

Component III: Data Report

Assessed based on Descriptives & Probability & Inference module course material.

if R code does not reproduce statistics/figures reported then ignore the corresponding written text for those stats/figures that do not reproduce = it's considered blank.

Differences for 3 Designs	**11 × 3 points**
Descriptives	***6 (per question = design)***
Sample size	1
Central tendency	1
Spread	1
Difference of interest	1
General	2
(show data, relevant other features, respecting study design & data type)	
Inference	***5 (per question = design)***
Sampling uncertainty	2
(quantified for relevant statistic: CI or SE, H0,test statistic, p-value)	
Justification of inference method	1
(assumption, study design, …)	
Interpretation	1
(magnitude, articulation, generality, interestingness, credibility; effect size, …)	
Q4: Insight on "Power" & general insight or extra	**6 points**
Argumentation I	3
in terms of sample size, size of difference, variance	
Argumentation II	3
in terms of data type, type of difference, study design	

Extra credit possible for extra effort/insight (e.g., analysis with and without outlier, multiple methods for approximation of SE, …)

Final Component Grade: E ≥ 20; D ≥ 23; C ≥ 27; B ≥ 31; A ≥ 35;

Reweighted &limited expectations to reflect absence of extensive non-inclass practice on relevant part of inference task.