

A2: Group 16 5.5/12 → 2.75/6

1. Formatting:

0 / 0.75

all margins 2.5cm

12 pt size

no raw R code or output

max 7 pages

informative title

member names on all pgs

all pages numbered

no blurry plots (**NOT png**)

- too many digits

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined (unclear, but ok)

3. EDA:

1.25 / 2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

0.25 / 2

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

(Show ANOVA table) - make sure explanatories are **FACTORS**, ie, correct df

Incomplete: First write out the model that you are estimating mathematically

5. Model assessment:

0.5 / 2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, residuals vs. fitted

- SQUARE

clearly explain plot interpretations

3 / 7.75

0/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max 2 sig digits on coefs

0.75/1.25

7. Plots:

- make 'pretty' labels

and caption on all figures

label size (not too small)

captions

placement

NOT BLURRY

+ number each figure

0.75/1

8. Conclusions

recap analysis

state main findings

9. Language quality:

(a little vague)

* interpretation
- your analysis doesn't validate anything

poor

satisfactory

good

excellent

10. Other comments:

- no refs

- boxplots too big and spread out

* cannot conclude causation, only association

- use sections to delineate analyses

2.5/4.25

A2: Group 18 6.5/12 → 3.25(6)

1. Formatting:

0.5 / 0.75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (**NOT png**)

- too many digits

2. Introduction/Background:

1 / 1

brief statement of scientific question

all variables defined

3. EDA:

1.25 / 2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

0.5 / 2

state how model fitted (ie, LS)

model specification in correct; also use mathematical form (not R formula)

CLEARLY describe how model selected

define all terms

AIC

Show ANOVA table - make sure explanatory are FACTORS, ie, correct df

- Don't need all the tables

5. Model assessment:

0.5 / 2

CLEARLY state model assumptions:

4 → (not 3)

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

- Explain + reference HSD

carry out assessment (graphics):

not done

qq normal plot of residuals
residuals vs. fitted

- SQUARE

- Don't need Levene / Shapiro-Wilks

3.75 / .75

Figure 4 unnecessary

0.5/1

6. Write out final estimated model mathematically

hat on response variable
(ok if coefs in table)

max 2 sig digits on coefs

1/1.25

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0.25/1

8. Conclusions

recap analysis

* interpretation
state main findings
→ also re-state final model

1/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

* cannot conclude causation, only association

2.75/4.25

A2: Group 19 7.5/12 → 3.75/6

1. Formatting:

0.5/0.75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (**NOT png**)

(too many digits in parts)

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

3. EDA:

1/2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

incomplete

4. Model fitting:

1.5/2

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

- R^2 / $Adj R^2$? (OK)

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

0.75/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

- interpret plots clearly

4.75/7.75

0.5/1

6. Write out final estimated model **mathematically**

- would be more clear if coefs inline (not table) error? max 2 sig digits on coefs

hat on response variable
(ok if coefs in table)

0.75/1.25

7. Plots:

- make 'pretty' labels

label size (not too small)

captions

placement

NOT BLURRY

0.5/1

8. Conclusions

recap analysis

state main findings

1/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- no refs

2.75/4.25

A2: Group 21

7.75 / 12 → 3.875 / 6

1. Formatting:

0.5 / 0.75

all margins 2.5cm

informative title

12 pt size

R format

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (NOT png)

- too many digits

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

3. EDA:

2/2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

0.5 / 2

β -model incorrectly specified

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms AIC / R^2 / Adj R^2

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

1/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, - SQUARE residuals vs. fitted

- interpret plots clearly

5/7.75

0.25 / 1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

1.25 / 1.25

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0.25 / 1

8. Conclusions

recap analysis

*interpretation
state main findings

vague + generic

1 / 1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- no refs (cite in text / ref at end)

*careful - cannot conclude causation, only association

- Write models mathematically, NOT using R formula

- What are the Fisher tests for?

2.75 / 4.25

A2: Group 23 6.5/12 → 3.25/6

1. Formatting:

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (NOT png)

0/0.75

R formula

2. Introduction/Background:

brief statement of scientific question

all variables defined - response?

0.75/1

3. EDA:

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

1/2

4. Model fitting:

First write model mathematically

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms ACF

Show ANOVA table - make sure explanatories are **FACTORS**, ie, correct df

0.75/2

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, residuals vs. fitted - SQUARE

very unclear

1/2

Tukey ASD not defined

3.5/7.75

0.5/1

clearly define $\beta_0 - \beta_{29}$

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.75/1.25

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

0.75/1

8. Conclusions

recap analysis

state main findings

- p-value interpretation
incorrect

1/1

9. Language quality:

poor satisfactory **good** excellent

10. Other comments:

- no refs

- use scientific notation to show sig digits
on p-values

- to interaction analysis in EDA

- Coef table should have name $(\hat{\beta} / SE(\hat{\beta})) / t / p$

3/4.25

A2: Group 24 6.5/12 → 3.25/6

1. Formatting:

0.5/0.75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (NOT png)

0.75/1

2. Introduction/Background: - use paragraphs

brief statement of scientific question

all variables defined

3. EDA:

1.5/2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

0.75/2

4. Model fitting: use paragraphing
First, write the model mathematically
state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms Tukey HSD

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

0.5/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, -SQUARE
residuals vs. fitted

+ clearly explain plot interp

4/7.75

0/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

1/1.25

7. Plots:

label size (not too small)

placement

(captions) (Figure 2)

NOT BLURRY

0.5/1

8. Conclusions

recap analysis

state main findings

1/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- give primary refs

- honest SD (not 'honestly'?)

- Don't need table 4

- use scientific notation to show sig digits in p-values

- Don't need Appendix

2.5/4.25

A2: Group 25 7.25/12 → 3.625/6

1. Formatting:

0/0 .75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (NOT png)

2. Introduction/Background:

1/1

brief statement of scientific question

all variables defined

3. EDA:

1.75/2

Don't need figures 3,4

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

0.5/2

First write model mathematically

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

TukeyHSD

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

NORAWR OUTPUT

5. Model assessment:

1.25/2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

clearly interpret diagnostic plots

- Don't need Shapiro-Wilk

4.5/7.75

0.25/1

→ incorrect specification

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max 2 sig digits on coefs

→ go why error?

1/1.25

7. Plots:

label size (not too small)
placement

(captions) (figure b)

NOT BLURRY

0.5/1

8. Conclusions

recap analysis

* interpretation
state main findings

1/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- no refs

* careful - cannot conclude causation, only association

2.75/4.25

A2: Group

26

8/12

→ 4/6

1. Formatting:

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (NOT png)

2. Introduction/Background:

brief statement of scientific question

all variables defined

3. EDA:

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

CLEARLY state model assumptions:

- errors have mean 0
- errors are homoscedastic (same variance)
- errors are uncorrelated
- errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, residuals vs. fitted

clear, correct plot interps

* saturated (not 'over saturated')

for normal dist, uncor \equiv indep \rightarrow assumptions 3, 4 redundant

0.75 / 0.75

1/1

1.5 / 2

1/2

0.75 / 2

5 / 7.75

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

7. Plots:

(label size (not too small)

placement

captions

(**NOT BLURRY**)

8. Conclusions

(recap analysis

(*) interpretation
state main findings

9. Language quality:

poor

(satisfactory

good

excellent

10. Other comments:

(*) careful - cannot conclude causation, only association

3/4.25

A2: Group 27 2.25/12 → 1.125/6

1. Formatting:

all margins 2.5cm

12 pt size

no raw R code or output

max 7 pages

informative title

member names on all pgs

all pages numbered

no blurry plots (**NOT** png)

2. Introduction/Background:

brief statement of scientific question

all variables defined

3. EDA:

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, - square residuals vs. fitted

+ clearly explain plot interpretations

1.25/7.75

0/0.75

0/1

0.5/2

0/2

0.75/2

0.25/

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.25/1.25

7. Plots:

label size (not too small)

~~captions~~

placement

NOT BLURRY

too much blank space
not done

0

8. Conclusions

recap analysis

state main findings

0.5/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- no refs

- report VERY incomplete

- writing style too much like 'question/
answer' format

1/4.25

Don't need both lighting + Sat, just do lighting

A2: Group 20 4/12 → 2/6

1. Formatting:

all margins 2.5cm

12 pt size

no raw R code or output

max 7 pages

informative title

member names on all pgs

all pages numbered

no blurry plots (NOT png)

- too many digits

2. Introduction/Background:

brief statement of scientific question

all variables defined

Sat/lighting not indicators

3. EDA:

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

→ OUT OF ORDER: DO BEFORE model fitting/assessment

- SQUARE QQ

→ stratified summaries for light score by factor levels

4. Model fitting:

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df OK

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, residuals vs. fitted

- SQUARE

0.5/0.75

0.5/1

0.75/2

0.25/2

0/2

2/7.75

0/1, not done

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.5/1.25

7. Plots: *incomplete - no model assessment plots*

label size (not too small)

captions

placement

NOT BLURRY

0.5/1

8. Conclusions

recap analysis

***** interpretation
state main findings

1/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- no refs

***** careful - cannot conclude causation,
only association

2/4.75

A2: Group 29 8/12 → 4/6

1. Formatting:

0.5/0.75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (**NOT** png)

R formula in plots

2. Introduction/Background:

0.75/1

brief statement of scientific question

all variables defined - outcome?

3. EDA:

1.5/2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

summary stats stratified by factor levels

4. Model fitting:

0.75/2

model incorrectly specified

state how model fitted (ie, LS)

not aov

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

1.5/2

Don't need Shapiro-Wilk / Kruskal-Wallis

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carefully interpret plots

carry out assessment (graphics):

qq normal plot of residuals, - **SQUARE**
residuals vs. fitted

- You assess assumptions, not 'verify'
- Don't need Levene / Durbin-Watson

5/7.75

0.75/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.75/1.25

7. Plots: - make 'pretty' labels / **NO R FORMULAS**

label size (not too small)

captions

placement

NOT BLURRY

0.5/1

8. Conclusions

recap analysis

state main findings *****interpret

1/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

-no refs

*****Careful - cannot conclude causation, only association

***** put all coefs in 1 table with name / $\hat{\beta}$ / $SE(\hat{\beta})$ / t / P

-Tukey HSD not defined

3/425

A2: Group 30 7.25/12 → 3.625/6

1. Formatting:

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (**NOT** png)

2. Introduction/Background: - Helson and Jeffers (not 'V0')

brief statement of scientific question

all variables defined

- explanatory vars are categorical
- NOT discrete

3. EDA:

- SQUARE QQ

univariate numerical

bivariate numerical (cor)

- Don't need figure 5

univariate graphical

bivariate graphical

4. Model fitting:

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

AIC

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

Carefully interpret the diagnostic plots

- Don't need resids. boxplot

- Don't need Durbin-Watson

- you assess assumptions, not 'validate'

0.5/0.75

0.75/1

1.5/2

0.5/2

1.25/2

4.5/7.75

0.25/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

1.25/1.25

7. Plots:

label size (not too small)

(captions)

placement

NOT BLURRY

0.5/1

8. Conclusions

recap analysis

state main findings

0.75/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- look at interactions in EDA

2.75/4.25

A2: Group

67

4.5/12 →

2.25/6

1. Formatting:

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (**NOT png**)

2. Introduction/Background:

brief statement of scientific question

all variables defined - *not sufficiently clear*

3. EDA: SQUARE QQ

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatory are **FACTORS**, ie, correct df

5. Model assessment:

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, SQUARE residuals vs. fitted

- *carefully interpret plots*

0.5 / 0.75

0.75 / 1

0.75 / 2

0.25 / 2

0.5 / 2

2.75 / 7.75

not done

0/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max 2 sig digits on coefs

7. Plots:

0.75/1.25

label size (not too small)

captions - axis labels

placement

interaction plots

NOT BLURRY

8. Conclusions

0.25/

recap analysis

* interpretation
state main findings

9. Language quality:

0.75/

poor

satisfactory

too vague

good

excellent

10. Other comments:

- put refs at end, NOT in footnotes

* Cannot conclude causation, only association

- put interaction plots in EDA

- cannot estimate error variance from 3-way

interaction because then the model is saturated

(ie, 1 obs per combination)

1.75/4.25

A2: Group

68

7.25/12

3.625/6

1. Formatting:

0.75/0.75

all margins 2.5cm

(informative title)

12 pt size

member names on all pgs

no raw R code or output

all pages numbered

max 7 pages

no blurry plots (NOT png)

2. Introduction/Background:

- separate intro into paragraphs

brief statement of scientific question

response?

all variables defined

- explanatory vars are categorical (not continuous)

3. EDA:

0.25/1

1/2

- Don't need table

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

summary stats stratified

4. Model fitting:

1.25/2

Table 2 hard to read

- First write out model mathematically

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

AIC, backward

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

1.25/2

you assess assumptions, NOT 'verify'

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, residuals vs. fitted

- SQUARE

- Carefully interpret plots

4.5/7.75

1/1
6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.5/1.25
7. Plots:

label size (not too small)

placement

captions

NOT BLURRY

Design plot (not 'plot of the design')
- Interaction plot
- legend cut off

state main findings

* Interpretation

0.25/1
8. Conclusions

recap analysis

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- cite refs in text

- don't need Table 1

- repetitive writing style

* Cannot conclude causation, only association

- use better sectioning

2.75/4.25

A2: Group 69 8/12 → 4/6

1. Formatting:

0.75 / 0.75

- all margins 2.5cm
- informative title
- 12 pt size
- member names on all pgs
- no raw R code or output**
- all pages numbered
- max 7 pages
- no blurry plots (**NOT png**)

2. Introduction/Background:

1/1

- brief statement of scientific question
- all variables defined - response (not 'target') variables

3. EDA: - SD (NOT SE)

1.5 / 2

- univariate numerical
- bivariate numerical (cor) *summary stats stratified by factor level*
- univariate graphical
- bivariate graphical

4. Model fitting:

1/2

First, specify the model mathematically
state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms AIC / stepwise / forward / backward

Show ANOVA table - make sure explanatories are **FACTORS**, ie, correct df

- How do you arrive at final model?

5. Model assessment:

1.5 / 2

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

- carefully interpret plots

5.75 / 7.75

0.75/1

no error term in est. model

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

0.5/1.25

7. Plots:

label size (not too small)

placement

(captions)

(Figure 3)

NOT BLURRY

0.25/1

8. Conclusions

recap analysis

state main findings.

- no statistical 'proofs'

0.75/1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- some sentences too long, making your explanations unclear and hard to follow

2.25/4.25

A2: Group 80 $5.5/12 \rightarrow$ 2.75/6

1. Formatting:

0.5/0.75

all margins 2.5cm
12 pt size

informative title

no raw R code or output

member names on all pgs

all pages numbered

max 7 pages

no blurry plots (NOT png)

2. Introduction/Background:

0.75/1

brief statement of scientific question

all variables defined - response?

3. EDA:

0.25/2

mostly missing (only have design plot)

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

First, describe model mathematically

0.5/2

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms Tukey HSD

Show ANOVA table - make sure explanatory are FACTORS, ie, correct df

where is table with 2-way interactions?

5. Model assessment:

0.75/2

CLEARLY state model assumptions:

- errors have mean 0
- errors are homoscedastic (same variance)
- errors are uncorrelated
- errors are normally distributed

carry out assessment (graphics):
qq normal plot of residuals,
residuals vs. fitted

- carefully interpret plots
- Tukey (not Tuckey)

2.75/7.75

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

7. Plots:

label size (not too small)

captions

placement

NOT BLURRY

8. Conclusions

recap analysis

state main findings

* interpretation

very unclear

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- no refs

- Tukey (not 'Tuckey')

* cannot conclude causation, only association

- Your report does not seem to follow a

logical order: Intro/EDA/model + fitting + selection
assessment / Conclusions

- Don't need 3-way interactions because that
corresponds to a saturated model (i.e., 1 parameter
per obs, i.e., 1 obs per combination)

2.75/4.25

A2: Group 88 5.5/12 → 2.75/6

1. Formatting:

0.5 / 0.75

all margins 2.5cm

informative title

12 pt size

member names on all pgs

no raw R code or output

R Formula
all pages numbered

max 7 pages

no blurry plots (**NOT** png)

2. Introduction/Background:

brief statement of scientific question

all variables defined

not clear

3. EDA:

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

summary stats for light score stratified by factor levels

4. Model fitting:

Specify model mathematically (not R formula)

state how model fitted (ie, LS)

CLEARLY describe how model selected

define all terms

Show ANOVA table - make sure explanatories are FACTORS, ie, correct df

5. Model assessment:

Put Figure 3 after section b paragraph

CLEARLY state model assumptions:

1. errors have mean 0
2. errors are homoscedastic (same variance)
3. errors are uncorrelated
4. errors are normally distributed

carry out assessment (graphics):

qq normal plot of residuals, residuals vs. fitted

- SQUARE

- clearly and carefully interpret plots

3.5 / 7.75

0/1

6. Write out final estimated model **mathematically**

hat on response variable
(ok if coefs in table)

max **2 sig digits** on coefs

7. Plots:

0.75 / 1.25

label size (not too small)

(captions)

placement

NOT BLURRY

0.25 / 1

8. Conclusions

recap analysis

state main findings

* interpretation

1 / 1

9. Language quality:

poor

satisfactory

good

excellent

10. Other comments:

- cite ref in text + put full ref at end

- 3-way not 2-way anova (or multiway)

* can only conclude association, **NOT** causality

2/4.25