GLM: Name KA 7.75/12 → 3.875/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief background and statement of scientific question

all variables defined

0.5/1

3. EDA: 'Extra' Figure 1 here

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

2/2

4. Model fitting: Poisson not poisson

give mathematical definition of model — not correct + suspicious + incomplete

state how model fitted (ie, maximum likelihood) — not 'R uses'

CLEARLY describe how model selected

define all terms AIC, 'dispersion stat'

0.75/2

Pearson not pearson

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1.25/2

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) + Explain clearly

5.5/8

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

1/1

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots:

6.5/1

label size (not too small) informative captions

placement Extra Figure! explanations

8. Conclusions

0.25/1

1. recap analysis 2. state and interpret main findings

be specific

9. Overall presentation (clarity of explanations, appropriate citations / references) :

0.5/1

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

_____

_____

_____

_____

2.25/4

GLM: Name _____ AC 6.75/12 → 3.375/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

0.75/1

2. Introduction/Background: — too many digits

0.5/1 unclear, imprecise

brief background and statement of scientific question

all variables defined

3. EDA:

0.5/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting: don't need univariate

0.75/2

give mathematical definition of model — not correct + suspicious + incomplete

state how model fitted (ie, maximum likelihood) — Before fitting

CLEARLY describe how model selected

define all terms

- not 'observe impact on # attacks'

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1.25/2

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) + explain

single line

3.75/8

1/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions somewhat incomplete be specific + 'improve accuracy'?

1. recap analysis 2. state and interpret main findings

0.5/1

9. Overall presentation (clarity of explanations, appropriate citations / references) : + EDA logic hard to follow

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: - not 'try to'

3/4

GLM: Name _____ LC 5/12 → 2.5/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

0/1

2. Introduction/Background: use paragraphs NO AI

brief background and statement of scientific question

all variables defined

imprecise, + Don't need to compare - you are the analyst

0.75/1

3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

1/2

4. Model fitting:

give mathematical definition of model incomplete

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC, deviance not 'confirm'

0.75/2

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1/2

carry out assessment (numerical / graphics): + EXPLAIN

relevant scatterplots (linearity assumption)

3.5/8

0.75/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

0.5/1

7. ~~Plots:~~

label size (not too small) informative captions

placement explanations

0.25/1

8. Conclusions

1. recap analysis 2. state and interpret main findings

not correct

0/1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

— NO AI ALLOWED —

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references (Clay?)

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear incomplete

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

1.5/4

GLM: Name _____ YC 8.75/12 → 4.375/6

1. Formatting:

all margins 2.5cm

12 pt size

no raw R code or output

max **10** pages

informative title

name on all pages

all pages numbered

no blurry plots (**NOT png**)

0.75/1

2. Introduction/Background:

brief background and statement of scientific question

all variables defined

0.5/1

3. EDA:

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

2/2

4. Model fitting:

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

0.5/2

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1.75/2

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption)

model specifications

not 're-analyze'

Don't need Figure!

'incomplete + don't use R formulas

LRT + state hyps mathematically

+ clear explanation

5.5/8

4/4

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement explanations

0.75/1

8. Conclusions

1. recap analysis 2. state and interpret main findings

be specific

1/1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

3.25/4

GLM: Name NG 9.25/12 → 4.625/6

1. Formatting:

1/1

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

2. Introduction/Background:

0.75/1

brief background and statement of scientific question — imprecise

all variables defined

3. EDA:

2/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting:

1.5/2

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

results table for final model

1.25/2

5. Model assessment: not 'sig worse' : no statistical test

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption)

- how does normal QQ 'help' (specifically)
- square qq plots

first explain plots then interpret then conclude

6.5/8

(define Y)

0.75/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

0.75/1

7. Plots:

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions

not correct

1. recap analysis 2. state and interpret main findings

TEDA

0.75/1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: - square QQ plots

2.75/4

GLM: Name M-M G-L 7.5/12 → 3.75/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

1/1

2. Introduction/Background: (imprecise)

brief background and statement of scientific question

all variables defined

0.75/1

3. EDA: all

univariate numerical — bivariate numerical (cor) all pairs

univariate graphical — bivariate graphical

all vars

0.5/2

4. Model fitting:

give mathematical definition of model incomplete

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms deviance (resid)

1/2

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson 2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1.5/2

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) + explain clearly

4.75/8

1/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

0.75/1

7. Plots:

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions

1. recap analysis 2. state and interpret main findings

not completely correct

0.5/2

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

2.75/4

GLM: Name _____ OL 8.5/12 → 4.25/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief background and statement of scientific question — not 'same research' → Be specific

all variables defined

0.5/1

3. EDA: (ok)

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

2/2

4. Model fitting:

give mathematical definition of model — no ^ + incomplete

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms (residual) deviance, dispersion stat, VIF

0.75/2

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1.5/2

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) — Explanation

5.75/8

1/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots: Figure 3 should not be square

1/1

label size (not too small) informative captions

placement explanations

0.25/1

8. Conclusions

1. recap analysis +EDA 2. state and interpret main findings — be specific

0.5/1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

- grammar check
- use more paragraphing
- many run-on sentences

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other:

2.75/4

GLM: Name RL 8.75/12 → 4.375/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

1/1

2. Introduction/Background: Don't need to replicate - you are the analyst

brief background and statement of scientific question — clearly state

all variables defined

0.5/1

3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

1.75/2

4. Model fitting: not 'ensure' all pairs scatterplots

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC, VIF

Table of results for coefs

1.25/2

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption)

First explain plots, then interpret then conclude

1.5/2

6/8

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots:

label size (not too small) informative captions

placement explanations

8. Conclusions

1. recap analysis 2. state and interpret main findings

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

_____

_____

_____

_____

GLM: Name _____ EM 8/12 → 4/6

1. Formatting:

1/1

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

"Don't need R commands"

max **10** pages — no blurry plots (**NOT png**)

0.5/1

2. Introduction/Background:

brief background and statement of scientific question

all variables defined

1.25/2

3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

histograms not boxplots — all pairs

1.5/2

4. Model fitting:

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

(CLEARLY describe how model selected

define all terms - multicollinearity measure

5. Model assessment:

1.5/2

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption)

- SQUARE QQ plot

5.75/8

0.5/1

6. Write out final *estimated* model **mathematically** — one selected model

hat on *response* variable — max **2 sig digits** (after decimal) on coefs

0.75/1

7. Plots: + Figure 4 is a Table + it's too small

label size (not too small) — informative captions

placement — explanations

0.25/1

8. Conclusions

1. recap analysis — 2. state and interpret main findings — vague

0.75

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor — satisfactory — good — excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty') Square QQ

Other: Q1: you can do either, just explain reasoning

Q2: You could if you want, this is pretty informal

Q3: just give a visual assessment

Q4: what you have seems reasonable

2.25/4

(*) Don't need to re-do

GLM: Name MM 10/12 → 5/6 → 6/6

1. Formatting:

1/1

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

Don't need R details

max **10** pages — no blurry plots (**NOT png**)

2. Introduction/Background: 0.75/1

imprecise

brief background and statement of scientific question

all variables defined

3. EDA: 2/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting: 1.5/2 don't need univariate

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC, Deviance

5. Model assessment:

1.25/2

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) - 1 line

interp: diffres'

6.5/8

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots:

label size (not too small) informative captions

placement explanations

8. Conclusions

1. recap analysis 2. state and interpret main findings (+EDA)

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other:

3.5/4

GLM: Name _____ RM 9.25/12 → 4.625/6

1. Formatting:

0.75/1

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

– too many digits not precise

2. Introduction/Background:

0.75/1

brief background and statement of scientific question

all variables defined

3. EDA:

1.75/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting:

1.25/2

logic a little hard to follow all pairs

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms

Results table (orig + quasi)

5. Model assessment:

1.5/2

inference relies on the assumptions

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption)

First explain plots then interpret then conclude

6/8

1 / 1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

0.75 / 1

7. Plots:

label size (not too small) informative captions

placement explanations

0.75 / 1

8. Conclusions

be specific

1. recap analysis 2. state and interpret main findings

+EDA (explicitly) vague

0.75 / 1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

3.25 / 4

(*) Don't need to re-do

GLM: Name SM 10.75/12 → 5.375/6 → 6/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output (Don't need R fns) — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

Y/1

2. Introduction/Background:

0.5/1

I don't see it

brief background and statement of scientific question

all variables defined

3. EDA:

2/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting:

1.75/2

give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC

5. Model assessment:

1.75/2

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption)

7/8

(ok)

1/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots:

1/1

label size (not too small) informative captions

placement explanations

0.75/1

8. Conclusions

(not 'influenced by')

1. recap analysis 2. state and interpret main findings

(+EDA, explicitly)

9. Overall presentation (clarity of explanations, appropriate citations / references) :

1/1

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

_____

_____

_____

_____

3.75/4

GLM: Name _____ SP 9.75/12 → 4.875/6

1. Formatting:

all margins 2.5cm — informative title

1/1 — 12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

0.75/1 — 2. Introduction/Background: imprecise

brief background and statement of scientific question

all variables defined

2/2 — 3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting:

1.5/2 — give mathematical definition of model

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms AIC, (residual) deviance, VIF

5. Model assessment:

1.5/2 — CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) 1 line

6.75/8

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

1/1

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots:

0.75/1

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions

be specific not correct

1. recap analysis 2. state and interpret main findings

0.75/1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory / good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

_____

_____

_____

_____

3/4

GLM: Name _____ MV 7.5/12 → 3.75/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief background and statement of scientific question

all variables defined

0.5/1

3. EDA: Why Table 1? not clear

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

2/2

4. Model fitting:

give mathematical definition of model — incomplete — all pairs

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms — VIF, AIC

0.75/1

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references — Before plots

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1/2

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) ?

5.25/8

0.75/1 $\hat{\beta}$'s

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

0.75/1 7. Plots:

label size (not too small) informative captions

placement explanations

be specific not entirely correct

predicting or estimating

(not 'calculating')

0.25/1 8. Conclusions

1. recap analysis 2. state and interpret main findings

9. Overall presentation (clarity of explanations, appropriate citations / references) :

0.5/1 poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other:

2.25/4

GLM: Name 5-CW 8/12 → 4/6

1. Formatting:

all margins 2.5cm — informative title

12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

1/1

2. Introduction/Background:

brief background and statement of scientific question — goal not 're-analyze'

all variables defined

0.75/1

3. EDA:

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical — all pairs

1.25/2

4. Model fitting:

give mathematical definition of model — incomplete — why $\beta_0 \sim N(0, \sigma^2)$

state how model fitted (ie, maximum likelihood) (OK)

CLEARLY describe how model selected — shouldn't you center around log(mean(E(Y)))?

define all terms — are 5 ≠ 2 SD or var? CI =?

1/2

5. Model assessment:

CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

1.5/2

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) — Explain + interpret clearly

5.5/8

0.75

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

1/1

7. Plots:

label size (not too small) informative captions

placement (you could put in text rather than at end) explanations

1/1

8. Conclusions

0.25

1. recap analysis (+EDA) 2. state and interpret main findings (be specific; not 'confirms assoc')

9. Overall presentation (clarity of explanations, appropriate citations / references) :

0.5

poor satisfactory good excellent

1/1

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other: _____

_____

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_____

_____

2.5/4

GLM: Name _____ SZ 9.25/12 → 4.625/6

1. Formatting:

all margins 2.5cm — informative title — too many digits

0.75/1 12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages — no blurry plots (**NOT png**)

2. Introduction/Background: most important??

0.5/1 brief background and statement of scientific question — clearly

all variables defined

3. EDA:

2/2 univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting: not 'essentially a GLM' - it IS a GLM

1.25/2 give mathematical definition of model — likelihood, not max lik fn; what you have is log like

state how model fitted (ie, maximum likelihood)

CLEARLY describe how model selected

define all terms M1, AIC

5. Model assessment:

1.5/2 CLEARLY state model assumptions: + give PRIMARY references

1. count outcome Poisson
2. independent obs
3. linear relation between log count and linear predictor
4. conditional mean = conditional variance

carry out assessment (numerical / graphics):

relevant scatterplots (linearity assumption) — what quantiles are compared?

First explain plots, then interpret then conclude

6/8

1/1

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

hat on *response* variable max **2 sig digits** (after decimal) on coefs

7. Plots:

1/1

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions

1. recap analysis (implicitly only) 2. state and interpret main findings overstated — be specific

0.75/1

9. Overall presentation (clarity of explanations, appropriate citations / references) :

poor satisfactory good excellent

10. Other comments:

A – no / incomplete / insufficient references

B – cite PRIMARY refs (not course notes, not wikipedia, *etc.*)

C – interpretation (cannot conclude causation, only association)

D – use your OWN WORDS / no apparently unattributed quotations

E – Intro: **1.** Give context; **2.** Clearly state scientific question; **3.** Describe data

F – univariate graphical: histograms not boxplots

G – (mathematical) model misspecified / unclear

H – clearly EXPLAIN / INTERPRET PLOTS (don't just state conclusions)

I – plot size / aspect ratio (make 'pretty')

Other:

3.25/4