surv: Name ML 6.5/12 → 3.25/6

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: use paragraphing; not clear

brief background and statement of scientific question

all variables defined

0.5/1

3. EDA: incomplete; how do you decide what is gaussian? not just plot

univariate numerical | bivariate numerical (cor)

univariate graphical | bivariate graphical

put all results in a table; scatterplots for numerical variables; mathematically?

0.75/2

4. Model fitting:

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

Var(Ŝ(t)); 0?

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — most accurate?

define all terms — AIC / forward / backward / step-wise

1/2

5. Model assessment: not 'ensure validity'; somewhat superficial; not 'verified'

CLEARLY state Cox PH assumptions: + give PRIMARY references + explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

0.75/2

carry out assessment (graphics / tests) and EXPLAIN:

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

First explain plots, then interpret, then conclude

'most likely' – incorrect interpretation

4/8

1.75/1

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

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

7. Plots: (ok)

1/1

label size (not too small) informative captions

placement explanations

0.25/1

8. Conclusions To summarize (not 'resume')

1. ~~recap analysis~~ 2. state and interpret main findings

0.5/1

9. Overall presentation (clarity of explanations, appropriate citations / references) : not 'proves' spell check

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: _____

_____

_____

_____

_____

2.5/4

surv: Name AM 7.75/12 → 3.875/6

1. Formatting:

(don't need 'individual report')

all margins 2.5cm — informative title

12 pt size — name on all pages

1/1

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

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

2. Introduction/Background:

explicit

0.5/1 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: very incomplete + superficial mathematically

0.5/2 KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

not done

state how model fitted (ie, maximum partial likelihood) Cox (not cox)

CLEARLY describe how model selected

define all terms

Incomplete results table

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references

0.75/2

1. hazards are proportional
2. linear form for covariates
3. no outliers

(+ explain)

carry out assessment (graphics / tests) and EXPLAIN:

First explain plots, then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

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

0.75/1

8. Conclusions

1. recap analysis 2. state and interpret main findings

don't 'validate' assumptions

0.5/1

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

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

surv: Name _____ LM 5.5/12 → 2.75/6

1. Formatting:

0.75/1

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**)

2. Introduction/Background:

0.75/1

brief background and statement of scientific question imprecise

all variables defined

3. EDA: incomplete

0.5/2

univariate numerical

univariate graphical all vars

bivariate numerical (cor) crosstabs

bivariate graphical

4. Model fitting: very incomplete not done

0.25/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment:

0.75/1

CLEARLY state Cox PH assumptions: + give PRIMARY references

+ explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

First explain plots then interpret then conclude

3/8

1/1

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

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

0.5/1

7. Plots: Figure 1 illegible; Figure 3 uninformative

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions – in a separate section clearly

1. recap analysis 2. state and interpret main findings

0.5/1

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: - Very incomplete

- logic very hard to follow

2.5/4

surv: Name _____ OM 8.25/12 → 4.125/6

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**)

1/1

2. Introduction/Background:

0.5/1

brief background and statement of scientific question — clearly state — goal imprecise (influence surv?)

all variables defined

1.75/2

3. EDA: 'important' predictors? what does that mean?

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting:

1/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — mathematically — not 'confirmed'

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — explain clearly - do you re-fit after each removal?

define all terms — AIC

Why NA values in Table 4?

5. Model assessment: — not 'ensure validity'

CLEARLY state Cox PH assumptions: + give PRIMARY references

1. hazards are proportional
2. linear form for covariates
3. no outliers

1/2

carry out assessment (graphics / tests) and EXPLAIN:

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

First explain plots then interpret then conclude

5.25/8

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

0.25

8. Conclusions

not correct

1. recap analysis 2. state and interpret main findings

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')

Other:

3/4

surv: Name _____ FN 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**)

Y / 1

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:

0.75/1

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

(+Table of results) numerically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected - stepwise

define all terms

AIC / LRT / concordance / score test

incomplete results - include $SE(\hat{\beta})$

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references

+explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

1/2

carry out assessment (graphics / tests) and EXPLAIN: First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5.5/8

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

what does 'robust' mean?

1. recap analysis (+EDA) 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: _____

_____

_____

_____

_____

3.25/4

surv: Name _____ DO 6.25/12 → 3.125/6

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**)

4/1

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: 0.75/1 not clear + incomplete

~~KM (write out estimator and variance)~~ + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. ~~Model~~ assessment: very unclear + incomplete

CLEARLY state Cox PH assumptions: + give PRIMARY references

1. hazards are proportional
2. linear form for covariates
3. no outliers

0.5/2

carry out assessment (graphics / tests) and EXPLAIN:

First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5/8

0/1 not done?

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

0/1 8. Conclusions not done?

1. recap analysis 2. state and interpret main findings

0.5/1 9. Overall presentation (clarity of explanations, appropriate citations / references) : incomplete spell check + grammar check

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: very incomplete + unclear

1.25/4

surv: Name AP 9.5/12 → 4.75/6

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

incomplete

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

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms Concordance, LRT / Wald / Score stats

5. Model assessment: not 'ensure'; how related to 'validity' (what does this mean)?

CLEARLY state Cox PH assumptions: + give PRIMARY references

+ explain

0.75/1

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

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: + small plots

label size (not too small) informative captions

placement explanations

1/1 8. Conclusions

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') resids

Other: _____

_____

_____

_____

_____

3.5/4

surv: Name JPe 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:

0.75/1

brief background and statement of scientific question — imprecise

all variables defined

3. EDA:

1/2

univariate numerical | bivariate numerical (cor) — where is it?

univariate graphical | bivariate graphical — all (continuous) pairs

4. Model fitting:

1/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — Var(Ŝ(t)) — makes more sense to split continuous at median — put in table

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — stepwise = ?

define all terms — AIC

5. Model assessment:

1.25/2

CLEARLY state Cox PH assumptions: + give PRIMARY references — First + explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: — First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5/8

0.75/1 ho not estimated

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

0.5/1 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: please use single column format

2.5/4

surv: Name _____ JPi 7.5/12 → 3.75/6

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**)

Don't need R commands

2. Introduction/Background:

0.75/1

brief background and statement of scientific question — imprecise

all variables defined

3. EDA: not done?

1/2

univariate numerical — bivariate numerical (cor) — Crosstabs

univariate graphical — bivariate graphical

4. Model fitting:

$\widehat{Var}(\hat{S}(t))$

1/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — mathematically — p-value digits (not = 0.00)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — incomplete + don't need R detail — what statistical test?

define all terms

5. Model assessment: not 'ensure validity', not 'verify'

CLEARLY state Cox PH assumptions: + give PRIMARY references

1.25/2

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: — First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5/8

what is dose_group? unclear

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 'examined influence'

1. recap analysis 2. state and interpret main findings + incomplete

+EDA

0.5/1 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')) Schoenfeld

Other: _____

_____

_____

_____

_____

2.5/4

surv: Name _____ EQ 8.25/12 → 4.125/6

1. Formatting:

Don't need cover page

all margins 2.5cm — informative title

0.75/1 — 12 pt size — name on all pages

no raw R code or output — all pages numbered

max **10** pages (you can put EDA plots in appendix and/or) — no blurry plots (**NOT png**) — too many digits

0.75/1 — 2. Introduction/Background:

brief background and statement of scientific question — not analysis details

all variables defined

3. EDA: (Table)

2/2 — univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

0.75/2 — 4. Model fitting:

incomplete — $Var(\hat{S}(t))$ — mathematically

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — Cox model incorrectly specified + describe selection procedure

define all terms AIC, C-index, Wald test, LRT

5. Model assessment:

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

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: — First explain plots, then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5.75/8

0.75/1 not $\hat{h_0}$ ← you don't estimate this

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 (incomplete + EDA + KM) 2. state and interpret main findings (carefully)

0.5/1 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: _____

_____

_____

_____

_____

2.5/4

surv: Name _____ PR 6/12 → 3/6

1. Formatting:

(remove excess blank space)

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: 0.5/1

brief background and statement of scientific question — unclear

all variables defined

3. EDA: Table with all summary stats 0.75/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

histograms all continuous — incomplete - all pairs for continuous

4. Model fitting: 0.75/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — mathematically; incorrect interpretation of p

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — you need to do the analysis, not copy the paper

define all terms

5. Model assessment: not 'verified'

CLEARLY state Cox PH assumptions: + give PRIMARY references 0.75/2

explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

First explain plots then interpret then conclude

3.75/8

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

0/1

8. Conclusions not done?

1. recap analysis 2. state and interpret main findings

0.5/1

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

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) not 'impact on'

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')

0

Other: - superficial in parts

2.25/4

surv: Name _____ DS 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**)

0.75/1

2. Introduction/Background:

- too many digits
imprecise

0.75/1

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:

Var($\hat{S}(t)$)

1/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

mathematically

- stratify by groups

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected stepwise

define all terms AIC

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references

1/2

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

Explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5.5/8

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: Figure 12 not very informative

label size (not too small) informative captions

placement + Figure 13 too small explanations

0.75

8. Conclusions

'suggested'?

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

0.5/1

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

(*) Don't need to re-do

surv: Name _____ HS 10/12 → ~~5/6~~ 6/6

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:

0.75/1

brief background and statement of scientific question — imprecise

all variables defined

3. EDA: (ok)

2/2

univariate numerical | bivariate numerical (cor)

univariate graphical | bivariate graphical

4. Model fitting:

1.75/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — square mathematically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment:

0.75/2

CLEARLY state Cox PH assumptions: + give PRIMARY references + explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

6.25/8

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

1/1

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

be specific

1. recap analysis 2. state and interpret main findings

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

surv: Name _____ LS 9/12 → 4.5/6

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**)

Y/1

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:

1/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) only 1 variable?

state how model fitted (ie, maximum partial likelihood) not $\hat{h}$ in math.

CLEARLY describe how model selected model stepwise = ?

define all terms AIC

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references

1.25/2

(+explain)

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: first explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

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

8. Conclusions 'imply' | 'possibly' ??

0.25

1. recap analysis 2. state and interpret main findings

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

0.75

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

surv: Name LT 9/12 → 4.5/6

1. Formatting:

- too many digits

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: Use paragraphing for clarity

0.75/1

partly imprecise

brief background and statement of scientific question

all variables defined

3. EDA: Don't need Figure 2

2/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting:

square mathematically

$\widehat{var}(\hat{S}(t))$

1.25/2 KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment: not 'validated'

1.5/2 CLEARLY state Cox PH assumptions: + give PRIMARY references

Schoenfeld

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

First explain plots, then interpret, then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

6.25/8

0.75/1 (explicitly)

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

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

0.25/1

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

0.5/1

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

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

surv: Name YT

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**)

2. Introduction/Background:

brief background and statement of scientific question

all variables defined

3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting:

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

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:

---

surv: Name JV 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

0.75/1 2. Introduction/Background:

brief background and statement of scientific question imprecise

all variables defined

3. EDA:

1/2 univariate numerical bivariate numerical (cor)

univariate graphical bivariate graphical

4. Model fitting: somewhat incomplete $\widehat{Var}(\hat{S}(t))$

1/2 KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) mathematically

h not H → H represents integrated hazard

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected 'formula' incorrect

define all terms

1/2 5. Model assessment: where are results summarized? (Table) incomplete

nf 'ensure validity' what does 'valid' mean here, specifically

CLEARLY state Cox PH assumptions: + give PRIMARY references

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: Explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

4.75/8

0.75/1 (not entirely clear)

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

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

1/1 7. Plots: Schoenfeld

label size (not too small) — informative captions

placement — explanations

0.75/1 8. Conclusions

1. recap analysis — 2. state and interpret main findings (supports, not highlights) (incorrect)

0.5/1 9. Overall presentation (clarity of explanations, appropriate citations / references) : (spell check)

poor — satisfactory — good — excellent

10. Other comments: misspelled Schoenfeld

A – no / incomplete / insufficient references K-M

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') Schoenfeld resids

Other: _____

_____

_____

_____

_____

3/4

surv: Name _____ NV 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**)

Y/1

2. Introduction/Background:

0.75/1 brief background and statement of scientific question — incomplete

all variables defined

3. EDA:

2/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting:

not 'significantly influence' — $Var(\hat{S}(t))$ — what do mathematically → p-value → p-value ≥ 0.05

1/2 KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

use more paragraphing here | not 'confirm'

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected — 'most accurate' = ?

define all terms — Concorance / LRT / Wald / log rank

5. Model assessment: not 'guarantee'

1/2 CLEARLY state Cox PH assumptions: + give PRIMARY references

explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

First explain plots, then interpret, then conclude

5.75/8

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

not correct

1. recap analysis 2. state and interpret main findings

be specific

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: – use more paragraphing

3/4

surv: Name _____ SV 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:

0.5/1 incorrect and imprecise

brief background and statement of scientific question

all variables defined

3. EDA: Don't need S-W / M-W / K-W

1.5/2

univariate numerical | bivariate numerical (cor)

univariate graphical | bivariate graphical

4. Model fitting:

1/2 estimated surv fn $\widehat{Var}(\hat{S}(t))$ mathematically

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment: not 'valide model', not 'verify'

1/2

CLEARLY state Cox PH assumptions: + give PRIMARY references

+ explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5/8

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: Figure 6 not informative Figure, not Fig.

label size (not too small) informative captions

placement explanations

0.5/1 8. Conclusions not 'confirms'

1. recap analysis 2. state and interpret main findings

0.5/1 +EDA

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

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

surv: Name A Van 6.25/12 → 3.125/6

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**)

2. Introduction/Background:

0.5/1

brief background and statement of scientific question — not clear

all variables defined

3. EDA:

1.5/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting:

0.75/2

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — incomplete, not 'shows', not done? mathematically

state how model fitted (ie, maximum partial likelihood) — Cox not cox

CLEARLY describe how model selected + interpretation

define all terms — use paragraphing not bullet points

5. Model assessment: — not 'verified'

0.75/2

CLEARLY state Cox PH assumptions: + give PRIMARY references — explain - what you have is vague: 'validity' / 'robustness'?

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: — Explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

incomplete

4.25/8

0.5/1 i not defined

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

0.25/1 8. Conclusions

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

not 'confirms' — 'likely'? ; be specific

0.5/1 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)

Don't over-interpret

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') resids

Other: + Figure 10 very hard to read

(*) + incorrect interpretations p.5

2/4

surv: Name A Vat 8.25/12 → 4.125/6

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:

1/1

brief background and statement of scientific question — imprecise

all variables defined

3. EDA:

2/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical (square)

4. Model fitting:

0.75/1

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

Var(Ŝ(t))

incorrect interpretation

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected stepwise

define all terms LRT, AIC

which models are being compared?

5. Model assessment:

0.75/1

CLEARLY state Cox PH assumptions: + give PRIMARY references

not verified

explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN:

First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

5.5/8

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

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:

surv: Name _____ A4 5.5/12 → 2.75/6

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**)

0.75/1

2. Introduction/Background: Very unclear

brief background and statement of scientific question – don't give vague statements about surv and what is THIS SPECIFIC context

all variables defined

0.5/1

3. EDA:

univariate numerical — Put all summary stats in a table

bivariate numerical (cor) — (why Spearman, all pairs)

univariate graphical

bivariate graphical — all pairs

1/2

4. Model fitting: logic hard to follow

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) — not done?

0.5/2

state how model fitted (ie, maximum partial likelihood) — Cox

CLEARLY describe how model selected

define all terms

5. Model assessment: – After Cox

CLEARLY state Cox PH assumptions: + give PRIMARY references + explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

0.5/2

carry out assessment (graphics / tests) and EXPLAIN: First explain plots then interpret then conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

3.25/8

0.75

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

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

0.75

7. Plots:

label size (not too small) informative captions

placement explanations

0.25

8. Conclusions

1. recap analysis 2. state and interpret main findings

not correct

0.5

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 - 2.5/4

surv: Name _____ DZ 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: - hard to follow imprecise + incorrect 0.5/1

brief background and statement of scientific question

all variables defined

3. EDA: ALL vars Table with all summary stats 0.5/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

} where is it?

4. Model fitting: plot KM curves

KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject) 1.5/2 → Table of results mathematically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references 1/2 + explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and EXPLAIN: First explain plots then interpret the conclude

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

4.5/2

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

1. recap analysis 2. state and interpret main findings

"stable + clincally..." ?

not confirmed ~~somewhat~~

0.75/1 9. Overall presentation (clarity of explanations, appropriate citations / references) : (somewhat incomplete in parts vague unclear

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

surv: Name HZ 7.25/12 → 3.625/6

1/1 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: use paragraphing for clarity

imprecise

brief background and statement of scientific question

all variables defined

1.5/2 3. EDA:

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

incomplete square

4. Model fitting:

nonparametric $\text{Var}(\hat{S}(t))$ mathematically

0.75/2 KM (write out estimator and variance) + log-rank test: state null / alt hyps, value of test stat, give null dist of test stat, p-value, conclusion (reject / do not reject)

'highly sig' not 'obvious'

mathematical model

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

incomplete results $SE(\hat{\beta})$, HR CI

5. Model assessment:

not 'correct'

0.75/2 **CLEARLY** state Cox PH assumptions: + give PRIMARY references

+ explain

1. hazards are proportional
2. linear form for covariates
3. no outliers

carry out assessment (graphics / tests) and **EXPLAIN**:

not schoenfeld

Schoenfeld residuals (PH assumption)
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers)

First explain plots then interpret then conclude

4.75/8

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:

+small plots

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions

vague - be specific

1. recap analysis 2. state and interpret main findings

0.5/1

(+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: _____

_____

_____

_____

_____

2.5/4