surv: Name AB 8.25/12 → 4.125/6

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**)

0.75/1 2. Introduction/Background:

brief background and statement of scientific question imprecise + incomplete

all variables defined

2/2 3. EDA: (ok)

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

0.75/1 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) mathematically (Figure 3 uninformative)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms AIC

5. Model assessment: explain what 'validity' means here

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: First explain plots then interpret then conclude

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

somewhat superficial

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

0.5/1 8. Conclusions incomplete

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

0.5/1 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 JB 7/12 → 3.5/6

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**)

(Too many digits in parts)

1/1

2. Introduction/Background: Essential?

0.75/1

brief background and statement of scientific question imprecise

all variables defined (clearly)

3. EDA: Don't need univariate Cox not just graphical

1/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical pairs plots for continuous

Put all EDA BEFORE KM + Cox mathematically

4. Model fitting:

incomplete 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)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected log-rank test in Cox?

define all terms

5. Model assessment:

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

4.5/8

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

0.25/1

8. Conclusions

1. recap analysis 2. state and interpret main findings

be specific
sig not 'important'

0.5/1

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

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: _____

_____

_____

_____

_____

2.5/4

surv: Name _____ LB 7/12 → 3.5/6

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**)

1/1

2. Introduction/Background: incorrect interpretation 0.75/1

brief background and statement of scientific question

all variables defined

3. EDA: 1/2

univariate numerical — bivariate numerical (cor) — not just graph

univariate graphical — bivariate graphical

4. Model fitting: incorrect interpretations

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 — model 'holds'? — 'not refuse' 0.75/2

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

0.75/2

1. hazards are proportional + explain
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)

4.25/8

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 _____ IB 7/12 → 3.5/6

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**)

0.75/1 2. Introduction/Background:

brief background and statement of scientific question imprecise

all variables defined

1.5/2 3. EDA: not 'confirm'

univariate numerical

univariate graphical

bivariate numerical (cor)

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) mathematically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected Backward (clearly)

~~define all terms~~ AIC

5. Model assessment:

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

1. hazards are proportional + explain
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)

4.75/8

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

0.25/1 8. Conclusions

1. recap analysis 2. state and interpret main findings not 'confirm' → incorrect

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') resids

Other: _____

_____

_____

_____

_____

2.25/4

surv: Name _____ SC 4/12 → 2/6

1. Formatting:

0.5/1

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 – 'tackling'?

all variables defined

3. EDA:

1/2

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

4. Model fitting: Figure 4 not very informative

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) — mathematically; put all results in a table

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment: not done?

0/2

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:

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

2.75/8

0.25/1 equation

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

0.25/1 9. Overall presentation (clarity of explanations, appropriate citations / references) : very 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: _____

_____

_____

_____

_____

1.25/4

surv: Name _____ JC 8.25/12 → 4.125/6

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**)

0.75/1

2. Introduction/Background: 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:

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

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) (interpretation) mathematically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected stepwise + stratified model

define all terms AIC

5. Model assessment: not 'confirm'

0.75/2

CLEARLY state Cox PH assumptions: + give PRIMARY references what does 'validated' mean?

+ 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)

5.25/8

1/1

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

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

7. Plots:

4/4

label size (not too small) informative captions

placement explanations

0.5/1

8. Conclusions

imprecise

1. recap analysis 2. state and interpret main findings

(+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')

Other:

3/4

surv: Name _____ 5 C 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**)

0.75/1 * Throughout

- too many digits

2. Introduction/Background:

0.75/1

imprecise

brief background and statement of scientific question

all variables defined

3. EDA:

1.25/2

Figure 3 illegible

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

pairs plots

4. Model fitting:

logic hard to follow

Do this first

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

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected - Don't need univariate - not 'impact survival' ↪ incorrect interpretation

define all terms Wald test

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)

* you need to put normal size after you decrease size

4.25/6

0.75/1 write as $\hat{h}(t)$ not log

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 4 uninformative

label size (not too small) informative captions Figure not Fig.

placement explanations

0.25/1 8. Conclusions

1. recap analysis 2. state and interpret main findings not 'likely assoc'

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

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2.25/4

surv: Name _____ TC 6.75/12 → 3.375/6

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**)

0.75/1 2. Introduction/Background: - Digits inconsistent

brief background and statement of scientific question imprecise

all variables defined

1.5/2 3. EDA:

univariate numerical	bivariate numerical (cor) not graph
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) mathematically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected incomplete results specifying not 'explicitly'

define all terms AIC Cox not cox

- no P=0.0000

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: First explain plots then interpret then conclude

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

4.5/8

0.75/1

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

no $\hat{h}_0$ - you don't estimate it

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

- the singular of Strata is stratum

7. Plots:

0.75

label size (not too small) — informative captions

placement — explanations

0.25

8. Conclusions — vague and incomplete

1. recap analysis — 2. state and interpret main findings — not clear

0.5/1

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

poor — satisfactory — good — excellent

10. Other comments:

A – no / incomplete / insufficient references — Schoenfeld

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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_____

_____

2.25/4

surv: Name _____ VC 6.5/12 → 3.25/6

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**)

0.5/1

2. Introduction/Background:

- too many digits in parts
imprecise + incorrect

brief background and statement of scientific question

all variables defined

3. EDA:

1.5/2

univariate numerical

univariate graphical

bivariate numerical (cor)

bivariate graphical

not just graphing

4. Model fitting:

not done?

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)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected - Don't need univariate

define all terms LRT / Wald / Score / concordance

5. Model assessment:

0.75/2

somewhat superficial

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

4/8

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

0.25/1

8. Conclusions

not correct

1. recap analysis

2. state and interpret main findings

0.5/1

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

somewhat superficial

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 _____ YC 8/12 → 4/6

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:

- too many digits

0.75/1

brief background and statement of scientific question imprecise

all variables defined

3. EDA:

1.5/2

univariate numerical | bivariate numerical (cor)

univariate graphical | (bivariate graphical) incomplete

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

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

CLEARLY describe how model selected

define all terms Weibull? ↑ ← (Interpretations)

results table: β

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)

5/8

not $\hat{h}_0$ ← not estimated

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

0.75/1 8. Conclusions

1. recap analysis 2. state and interpret main findings

vague in parts

0.75/1 9. Overall presentation (clarity of explanations, appropriate citations / references) :

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:

3/4

surv: Name ED 9/12 → 4.5/6

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**)

0.75/1 2. Introduction/Background:

brief background and statement of scientific question imprecise

all variables defined

1.5/2 3. EDA:

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) mathematically

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms AIC

5. Model assessment:

1.75/2 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:

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

6.5/8

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

0.25/1

8. Conclusions

1. recap analysis specifically 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: – Don't need contents

2.5/4

surv: Name _____ MDS 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 Don't put R fns

2. Introduction/Background:

0.5/1 brief background and statement of scientific question for you

all variables defined

3. EDA:

2/2

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting: incomplete

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

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

put all results in a table

5. Model assessment:

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: somewhat incomplete

Schoenfeld residuals (PH assumption) + hyp tests
Martingale residuals (linear form for continous variables)
Deviance residuals (to identify outliers) – more?

First explain plots, then interpret then conclude

5.75/8

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 Figure 3

placement explanations

0.5/1 8. Conclusions

not 'confirmed'

1. recap analysis (+EDA) 2. state and interpret main findings ← not completely correct

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: _____

_____

_____

_____

_____

2.75/4

surv: Name Adim 8.75/12 → 4.325/6

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 (ok) no R commands

2. Introduction/Background:

0.5/1 brief background and statement of scientific question not clear

all variables defined

3. EDA:

2/2

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

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

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected stepwise

define all terms AIC LRT of which 2 models?

5. Model assessment:

1.25/2 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

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, be specific

1. recap analysis (EDA & KM) 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') resid plots

Other:

3/4

surv: Name _____ MDub 6.75/12 → 3.325/6

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**)

4/4

2. Introduction/Background:

brief background and statement of scientific question — imprecise + incorrect

all variables defined

0.75/1

3. EDA: — how do you know which variables are 'meaningful'

univariate numerical (all summary stats) | bivariate numerical (cor)

univariate graphical | bivariate graphical

all vars — 1/2

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) — $\text{var}(\hat{S}(t))$ — mathematically

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

CLEARLY describe how model selected — KM not a model / not 'selected'

define all terms

0.5/2

not done for Cox

5. Model assessment: — not KM — Cox

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: — unclear how this was done

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

0.5/2

very unclear

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

0.75/1

8. Conclusions

not correct

1. recap analysis 2. state and interpret main findings

0.5/1

9. Overall presentation (clarity of explanations, appropriate citations / references) : very 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: - too much blank space in parts

- incomplete - no Cox explanation

3/4

surv: Name _____ AF 7.25/12 → 3.625/6

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 (- too many digits imprecise in parts)

all variables defined

3. EDA:

1.5/2

univariate numerical bivariate numerical (cor)

univariate graphical (+time) bivariate graphical (+Time)

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 interpretation not 'confirmed' 'suggesting'?

state how model fitted (ie, maximum partial likelihood)

(*) CLEARLY describe how model selected 'appears sig'?

define all terms mathematically

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: First explain plots then interpret then conclude

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

(*) You have not correctly fit the stratified model

5/8

Incorrect

0.5/1

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

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

7. Plots:

4/1

label size (not too small) informative captions

placement explanations

0.25/0.5

8. Conclusions use more paragraphing for clarity not correct

1. recap analysis 2. state and interpret main findings

+EDA

0.5/1

9. Overall presentation (clarity of explanations, appropriate citations / references) : what are all the commas for?

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

surv: Name _____ TF 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**)

0.75/1

(too many digits)

2. Introduction/Background:

0.75/1

imprecise

brief background and statement of scientific question

all variables defined

3. EDA:

1.5/2

not just heatmap

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

4. Model fitting:

0.75/2

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

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)

give table of results

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

AIC, concordance

Incomplete results

5. Model assessment:

0.75/2

CLEARLY state Cox PH assumptions: + give PRIMARY references

your 2+3 are equivalent

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)

4.5/8

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

6.5/1 8. Conclusions

1. recap analysis + EDA 2. state and interpret main findings not correct

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: Don't need EPFL logo

2/4

surv: Name _____ DG 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 (no R commands)	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 (imprecise)

all variables defined

3. EDA: (in a table)

1.25/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

4. Model fitting: what about the drug treatment?

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)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

5. Model assessment:

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)

4.5/8

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 (Figure 2)

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

(+EDA)

0.5/1

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

Sometimes logic hard to follow, missing variables

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: (*) But you DO conclude causation: for example 'which factors influence' (this is a causal statement); 'death hazard increased with...' (no, PREDICTED hazard), etc; there are more statements like this in your work

3/4

surv: Name _____ EH 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: use paragraphing to clarify somewhat imprecise in part

0.75/1

brief background and statement of scientific question

all variables defined

3. EDA:

1/2

univariate numerical

bivariate numerical (cor)

univariate graphical

bivariate graphical

4. Model fitting:

use paragraphing for clarity

KM (write out estimator and variance $\hat{Var}(\hat{S}(t))$) + 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

1/2

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected forward/backward

define all terms AIC

5. Model assessment: assess, not 'confirm validity'

1.5/2

CLEARLY state Cox PH assumptions: + give PRIMARY references (+ explain, not vague)

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

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

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

5.25/8

0.75/1 explicitly

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

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

0.75/1

7. Plots:

label size (not too small) informative captions

placement explanations

0.5/1 8. Conclusions use paragraphing hard to follow as written

not 'confirmed'

1. recap analysis (+EDA) 2. state and interpret main findings not correct

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 GJ 7.25/12 → 3.625/6

1. Formatting:

all margins 2.5cm	informative title (not 'influence')
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 (not explicit + imprecise)

all variables defined

3. EDA: (incomplete, put in table) 1.25/2

univariate numerical	bivariate numerical (cor) (cross-tabs)
univariate graphical	bivariate graphical (OK)

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) (mathematically, interpretation, not 'influence') 1/2

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected (not 'fit') – what test?

define all terms – Put variable names in Table 2 for clarity

5. Model assessment:

CLEARLY state Cox PH assumptions: + give PRIMARY references (unclear + incomplete) 0.75/2

+ explain

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

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

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

First explain plots, then interpret, then conclude

4.5/8

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 (no legend KM)

placement explanations

0.5 / 1

8. Conclusions

1. recap analysis (+EDA) 2. state and interpret main findings (not entirely correct)

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: somewhat unclear + incomplete explanations

2.75 / 4

surv: Name _____ SJ 8.5/12 → 4.25/6

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

Don't need R commands

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

2. Introduction/Background:

1/1

brief background and statement of scientific question

all variables defined

3. EDA:

1.75/2

univariate numerical — bivariate numerical (cor)

univariate graphical — bivariate graphical

all continuous

4. Model fitting:

1/2

put results in a table

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

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

all tests

procedure + tests (where do the p-values come from?)

1.25/2

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

carry out assessment (graphics / tests) and EXPLAIN:

what test?

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

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

0.5/1

8. Conclusions

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

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.*) Carl

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 JJ-G 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:

2/2

univariate numerical | bivariate numerical (cor) — no pie charts

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) — mathematically — put results in a table

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms AIC

5. Model assessment: not 'verified'

1/2

CLEARLY state Cox PH assumptions: + give PRIMARY references — not plots

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

5.5/8

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: Bar charts NO PIE CHARTS

label size (not too small) informative captions

placement explanations

0.25/1

8. Conclusions

1. recap analysis not entirely clear 2. state and interpret main findings – be specific not correct

0.5/1

9. Overall presentation (clarity of explanations, appropriate citations / references) : logic very 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: – use single column format

– please follow logic as outlined in these evaluation criteria – don't separate methods and results

2/4

(*) Don't need to re-do

surv: Name _____ GK 11/12 → 5.5/6 → 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:

1/1

brief background and statement of scientific question

all variables defined

3. EDA:

put in Table

univariate numerical	bivariate numerical (cor)
univariate graphical	bivariate graphical

(ok)

1.75/2

4. Model fitting:

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

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)

(all mathematically)

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected

define all terms

$\hat{\beta} \pm SE(\hat{\beta})$ in results table

5. Model assessment: assess not 'verify'

2/2

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:

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

Very good

7.5/8

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

1. recap analysis (EDA implicit only) 2. state and interpret main findings not correct

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:

3.5/4

surv: Name _____ IK 6.75/12 → 3.325/6

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: unclear + imprecise

0.75/1

brief background and statement of scientific question

all variables defined

1.25/2

3. EDA: write out words

univariate numerical | bivariate numerical (cor)

univariate graphical | bivariate graphical all pairs (continuous) mathematically

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)

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

somewhat incomplete

state how model fitted (ie, maximum partial likelihood)

CLEARLY describe how model selected fix β subscript

define all terms 'weak' H0 R?

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:

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

First explain plots then interpret then conclude

4.5/8

0.75/1

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

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

0.75/1

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 'confirming' validity?

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: _____

_____

_____

_____

_____

2.25/4