

STAC67H3F Case Study Project: marking rubric

Fall 2026

The project is marked out of 100: checkpoint 8, report 72, presentation 20. Each instruction of the project brief that is not respected costs 5 points on the project mark.

The report is marked on four criteria of 18 points each. For each criterion, the marker chooses the band that best describes the report as a whole, then a mark within that band. A report does not need to meet every descriptor of a band to be placed in it.

Report (72 points)

Criterion	Excellent 16–18	Good 13–15	Satisfactory 9–12	Weak 5–8	Inadequate 0–4
1. Question and data The question, the description of the dataset, the descriptive analysis.	A precise question the data can answer. Data clearly introduced (source, units, variables used). Targeted description: every figure or table is used later; data issues (missing or implausible values, unusual observations) found and handled.	A clear question and a correct description. The descriptive analysis is mostly relevant, with a few unused figures or a data issue only partly handled.	The question is vague, or the description is incomplete. The descriptive analysis is generic (a list of plots) and only loosely connected to the modelling.	The question is unclear or not stated. Little or misleading description; data issues ignored.	No question, or no description of the data.
2. Modelling Building the model, choosing among models.	Predictors, qualitative variables, transformations and interactions follow from the question and the description, and are explained. Model selection uses suitable criteria or procedures from the course; the final model is stated clearly.	A sensible model, with most choices justified. Model selection is carried out correctly but explained briefly.	A reasonable multiple regression, but choices are mostly unexplained, or model selection is mechanical (for instance, one automatic procedure without comment).	A single model fitted without justification, or serious errors (for instance, a predictor that is a function of the response).	No multiple regression, or a model unrelated to the question.

Report (continued)

Criterion	Excellent 16–18	Good 13–15	Satisfactory 9–12	Weak 5–8	Inadequate 0–4
3. Validation Diagnostics and remedial measures.	Residual analysis complete and correctly read (linearity, constant variance, normality, independence where relevant). Outliers, influential points and multicollinearity examined. Remedial measures taken where needed and checked again; remaining problems stated honestly.	Main diagnostics present and correctly read; remedial measures taken, with a partial re-check.	Some diagnostics present but read superficially, or problems detected and not acted on.	Diagnostics shown without interpretation, or misread.	No validation.
4. Interpretation and communication Results, conclusions, writing, figures.	Coefficients and intervals interpreted correctly, in context, with units, “other predictors held fixed”. A clear answer to the question, with its limitations. Well written and organised; figures and tables chosen with care, labelled, readable.	Correct interpretation and a clear conclusion; limitations mentioned. Clear writing with minor issues in figures or organisation.	Interpretation partly incorrect or out of context; conclusions weakly connected to the results. Writing or figures sometimes hard to follow.	Results reported without interpretation; unclear writing; poorly chosen or unlabelled figures.	No interpretation or conclusion.

Checkpoint (8 points, common to the group)

Element	Points	Full marks when
The question	2	It is stated clearly and the data can answer it.
Targeted descriptive analysis	3	It describes the response and its relations with the main predictors, and points out data issues.
First multiple regression and residual analysis	3	The model is fitted and its residual plots are shown and read.

Each element receives full, half or no marks. The checkpoint is mainly feedback: the comments matter more than the mark.

Presentation (20 points, individual)

Criterion	Points	What is assessed
Content and message	5	The question, the main result and the answer are clear to someone who has not seen the data.
Slides and figures	5	Few, readable slides; figures that support the message.
Pedagogy and time	5	The talk is addressed to classmates and fits in five minutes.
Individual part	5	The member's own part is clear, and the member answers questions with understanding.

The first three criteria are marked for the group; the last one for each member. Each criterion is marked 5 (excellent), 4 (good), 3 (satisfactory), 2 (weak) or 0 to 1 (inadequate).